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## GENERAL MEETING of the

### ARCHAEOLOGICAL INSTITUTE OF AMERICA

The Thirty-seventh General Meeting of the Archaeological Institute of America will be held in New York City, December 26-28, 1935. The Annual Meeting of the Council will be held during this period.

Members of the Institute and others who wish to present papers at the meeting are requested to send the title and a brief résumé of their papers to Professor Clarence Ward, General Secretary, Archaeological Institute of America, Oberlin College, Oberlin, Ohio, before December 1.

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#### ARCHAEOLOGICAL NOTES

#### THE SEASON 1934-35 AT DURA

#### PLATE XXIX

In some respects the season 1934–35 was the most successful we have ever had at Dura. Not only, as this brief account will show, do the new finds compare very favorably with the remarkable discoveries of other seasons, but also our knowledge of the history of the site was considerably enlarged by several special studies. A review of all the pilaster capitals and lintels from temples and houses shows a regular development which permits us to date with some certainty a large proportion of the buildings on the site. Extensive excavations in the necropolis enable us to trace the types of tombs in use from the third century B.C. until the destruction of the city. Excavations beneath the foundations of the late Redoubt throw much new light on the architectural development of the city. A new and complete catalogue reveals at a glance the extraordinary range of ceramic and glass wares.

Our first task was the investigation of the early synagogue. As soon as all the plans of the later building had been completed, the floor was torn up and the earlier construction brought to light. Beneath the chief room an earlier room was disclosed, smaller than the later building but similar in shape and arrangement. It was oriented as was the later building, had two entrances, the middle one for men, the smaller one close to the south corner for women, was adorned with a bench around the walls and contained, apparently, a niche (the Torah shrine) in the middle of the west wall. A new feature was the small antechamber in front of the women's entrance. Only the foundations of this early building were found except where the benches along the south wall of the later building preserved part of the south wall of the chief room. Here, fortunately, part of the mural decorations remained, geometric designs in bright colors. Fragments of fallen plaster showed that the walls of this early synagogue bore only geometric designs. The ceiling was decorated with circles and octagons in which were set gilded rosettes and the antechamber had been adorned with representations of fruit and flowers. Obviously, therefore, the early building contained no human or animal figures, possibly because the smaller community could not afford more elaborate decorations, but more probably because at this period regulations against human and animal images were more strict. Most interesting also was the fact that the early synagogue with its antechamber and court formed only one part of a larger complex which followed very closely the plan of a private house. In this complex the chief room and an alleyway to Wall street form the west side, the open court, the center, and the women's antechamber with additional rooms opening on the court, the other three sides. It will be recalled that the Christian church had also the general form of a private house, possibly for the purpose of concealment.

Digging around the Mithraeum yielded little except a few graffiti and the walls of a few poor houses. Even this negative result was important, however, for it

showed that there had been no sanctuary on the site previous to 168 A.D. and that the foundations of earlier residences had in part been utilized for the building of the Mithraeum.

The Redoubt is one of the most conspicuous buildings in Dura, for its great northern facing wall fronts on a ravine and stands some twenty to thirty feet high. The palace was first dug by M. Cumont and then by Yale University in the third campaign. Last year we began investigations beneath the floors and continued the work during a part of this season. Three distinct building periods are now apparent, the first of which is characterized by wall foundations of small stones laid in mud, the second



Fig. 1.—Plaque of Horn with Relief of Elk

by foundations of ashlar masonry linked with plaster and topped by gray mud brick, and the third by high rubble walls. The great facing wall and the series of rooms on the north side were added in the second period, otherwise the circuit wall of the palace remained the same throughout. From coins, one may date the earliest structure to the third century B.C. The second period belongs apparently to the end of the second century B.C. since the building materials and methods of construction are similar to those of the second palace on the citadel, a building belonging to the Parthian epoch. The latest Redoubt belongs to the Parthian period and probably signalizes the entrance of extensive rubble work at Dura just before the beginning of our era. Curiously enough, the plan of the third palace

finds a striking parallel in the fifth-century Persian palace recently unearthed at Duweir in Palestine.

South of the Palmyrene gate there was excavated first the little temple of Zeus Kyrios, the bas-relief of which was found last year set in the façade of Tower 16. The remains disclosed three separate periods in the development; in the first, or earliest, a small, almost square room enclosed an altar which rested against the tower; in the second, the sanctuary remained the same, but the altar was enlarged and a series of steps built leading up to the top. At the same time the rooms of a house were placed against the north side of the sanctuary. In the third and final period, the naos was extended to the north to include most of one room of the house, and to the south to enclose the whole front of the tower. At this period the floor level was so high that it blocked completely the entrance to the tower. Between the door and the altar a number of octagons of green glass were recovered, remains apparently of an ornamental window above the door. An inscription cut in the face of the tower just above the altar was dated in 28/9 A.D. and probably marks the first establish-

ment of the cult. On the altar were found ashes and the bones of small birds used in sacrifice, probably pigeons.

In front of Tower 15 was discovered a monumental staircase with double balustrade leading up the face of the last embankment to the top of the tower. The hypothesis that the final embankment along the circuit wall rose considerably higher than the chemin de ronde is confirmed, therefore, at least for this section. The most important small find was that of a piece of horn (Fig. 1), probably the ornamental cuff of a quiver or bow-case, adorned with four stags in a design, the nearest parallels to which are found in South Russia and Siberia. Between Tower 15 and the temple of Aphlad another Persian mine running beneath the circuit wall was brought to light. It will be recalled that last year a mine was excavated running from the south wadi beneath Tower 14 (the S.W. tower), and that beside Tower 15 lies the great Persian ramp on which the Persian troops mounted to the top of the walls. The new mine lay almost beneath the ramp and proceeded almost directly from the desert under the wall through the embankment. Its purpose was clearly to introduce an armed force into the city just at the point where the attack from the ramp would center. At the moment of attack, also, the firing of the wadi mine would cause the corner tower to fall. Thus the whole quarter would be exposed to the assailants.

We have already noticed that the clearing of the district immediately around the Mithraeum yielded little but negative results. We were, however, much more fortunate along the wall to either side. To the south, Tower 22 was cleared, the last of the long series along the west wall of the city, and here was brought to light a parchment (apparently a record of a division of property), the only parchment found this season. North of the Mithraeum and close beside Tower 2 the débris yielded a stone inscribed on both sides, recording the repair of a naos after the withdrawal of the Romans in 117 a.d. This announcement is of more than usual significance, for Trajan died in August 117 in Cilicia and the troops had already left Dura and the temple had been repaired before October 117, the beginning of the new year. It seems highly probable, therefore, that it was Trajan and not Hadrian who ordered the withdrawal of troops from Dura, a fact of the greatest importance for our knowledge of the policies of these two emperors.

Not far from this inscription, what is perhaps the most important discovery of the year was made: three painted wooden shields belonging to Roman auxiliary cohorts. The wood was very fragile and the painting faint, but fortunately they were sufficiently well preserved (probably because they lay together in a heap and so protected one another) to permit of accurate reconstructions. The design of one of them represents the god of war holding a spear in his left hand (Fig. 2). In many respects the figure recalls the painting of Iarhibol in the Temple of the Palmyrene Gods. The usual small shield held in the hand, however, is replaced by a larger oval shield, which rests on the ground beside the deity and which is similar in shape to the actual shield. The two other shields (Figs. 3 and 4) represent classical subjects, one, the fight of Greeks against Amazons on horseback, the second, the entry of the horse into Troy and the sack of the city. Apparently the scenes are symbolic, representing the conquest of the East, the Amazons and Trojans, by the West, the Greeks. The scenes are executed with extraordinary spirit and great skill. They were probably not

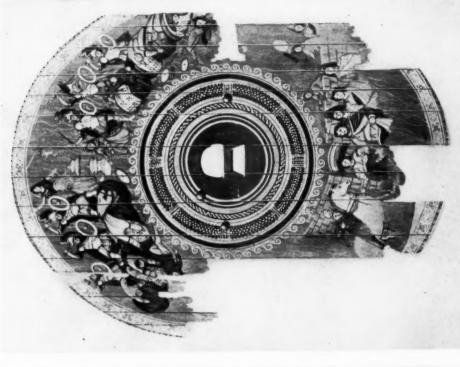
painted at Dura but could not have been made very far away, for they contain details markedly Syrian in character. Most striking is the position of the horses of the Amazons, which leap forward in a manner characteristic of Dura-Parthian representations. From horseback the Amazons shoot back at their assailants in the true Parthian style. Since the "Greeks" have Roman dress the shield as a whole presents a very interesting blend of the Oriental with the Greco-Roman tradition.

In the Roman quarter, the block immediately opposite the Praetorium was excavated, revealing a series of private houses later made over into barracks. One of the



Fig. 2.—Painted Shield (Reconstruction). Iarhibol (Courtesy of the Gallery of Fine Arts, Yale University)

rooms was adorned with a series of twelve medallions representing the Muses, another contained larger murals, only fragments of which were recovered. A small hoard of coins, a Roman weight of six ounces, and an inscription were the chief remaining finds. The inscription recorded the erection of part of a wall, apparently the wall around the camp, by one of the Roman detachments. Later, the foundations of this wall came to light running from close to Tower 22 (and thus enclosing the Mithraeum) through several blocks to the Roman amphitheatre. This wall of mud brick, then, formed the south side of the encampment; the circuit wall of the



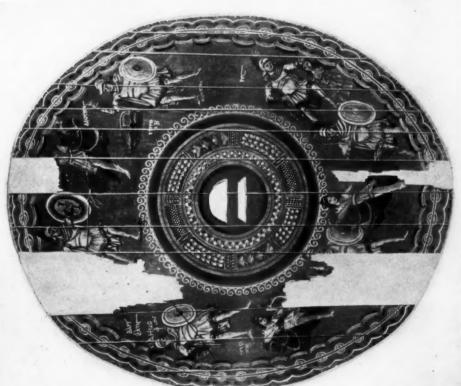


Fig. 3.—Painted Shield (Reconstruction), Battle of Amazons and Greeks

Fig. 4.—Painted Shield (Reconstruction). The Entry of the Wooden Horse into Troy and Above, the Sack of the City

(Courtesy of the Gallery of Fine Arts, Yale University)

city, the west and north sides; and the amphitheatre and bath with connecting wall, the east side. The whole comprises an area somewhat more than fifteen blocks in extent.

In the necropolis, Mr. Toll opened a series of tombs beneath the mound of débris

In the necropolis, Mr. Toll opened a series of tombs beneath the mound of débris west of the Palmyra gate. The collections of pottery, glass vessels, and jewelry com-



Fig. 5.—Terracotta Figure of Hermes

prised, however, only a part of the discoveries made in the cemetery. The bases of two square tower tombs were excavated last season halfway between the city gate and the arch of Trajan. It seemed, however, that this type, so common at Palmyra, was an exception at Dura, for the rest of the necropolis, as far as could be observed, was not only bare of walls, but for the most part leveled off to within a few centimeters of bed rock. Beneath the mound of débris, however, the bases of other towers came to light, some square, some round. We must, therefore, suppose that a great series of tower tombs covered a large part of the cemetery as at Palmyra, tombs which were perhaps partly leveled by the Persians, partly by later Arab robbers and by erosion. In the walls of some of the tombs, urns with ashes and parts of human bones were found, the first sure proof of cremation at Dura. In the underground tombs, Mr. Toll, partly with the help of pottery finds and coins, partly through a study of architectural details, was able to establish a sequence from Hellenistic times on, a most important contribution to our knowledge of the city's development. Equally interesting was the discovery of a funerary chapel, the

first of its kind discovered at Dura. Here were recovered a Palmyrene inscription of 33 B.C., dedicated to Baal and Iarhibol (the earliest example of Palmyrene writing known); a funerary inscription in Greek and some stone figurines. Nor can one omit the discovery in one of the tombs of a terracotta figure of the youthful Hermes, the most beautiful figurine yet found at Dura (Fig. 5).

Just before the end of the season there were found in a house south of the Redoubt remains of columns which seemed to have served in the second story of a house, for their bases lay considerably above the floor level. Excavations carried forward here as far as time would permit disclosed a most imposing private residence, a house belonging, as graffiti told us, to a certain Lysias, *epistates* of the city. Remarkable features included arched rubble doors of the type later common at Halibiyeh; a series of open windows along one side of the court to provide light and air to the stables, and a second story or pagoda supported in part by columns.

Still more important, however, was the discovery made after the work of excavation was completed. Mr. Pearson, in reviewing the plan of the city, discovered in Block H, just south of the temple of Hadad, a doorway larger than usual. Careful examination of the walls behind this doorway suggested the possibility of a temple, an hypothesis confirmed almost immediately when the efforts of two workmen were rewarded with the discovery of fragments of bas-reliefs. Here four reliefs and parts of two more were recovered, two of which were of exceptional interest. Both are of the same type, dedicated in the same year and were obviously made by the same hand. The great divinity is seated in the center, on the right stands a figure presenting a crown to the deity and on the left, a priest in Palmyrene costume offers sacrifice on a blazing altar. The extraordinary feature is that in one (Pl. XXIX A) the deity is a goddess, the Tyche, of Palmyra, while in the other (Pl. XXIX B) the Tyche of Dura is represented in the form of a male divinity. The Tyche of Palmyra wears the usual turretted headdress, she has beside her the lion of the desert and in front the usual nymph of the spring. A Victory presents to her the crown of sovereignty. The Dura god is seated between eagles, which betray his celestial character, and is crowned by an armed warrior who, the Palmyrene inscription tells us, is the diadochos Seleukos Nikator himself. Once more, then, the two cities Dura and Palmyra are associated together in a temple built just one hundred years after the erection of the temple of Palmyrene gods in the northwest corner of the city. The temple belongs to the middle of the 2nd century A.D.

Linked to this temple was a house complex which had originally bounded the temple on the north and had then been subjected to extensive alterations. By this change the chief room of the house, the diwan, had been destroyed and an arcade uniting the two buildings erected in its place. A second alteration was a transformation of one of the rooms into a small theatre-like hall corresponding to the salle-aux-gradins of other temples. Part of an inscription of the 20th Palmyrene cohort was found in the débris of the court. Apparently the house, or those rooms still remaining habitable, belonged to the Palmyrene priest or possibly to some proxenos of Palmyra who erected the temple beside his own residence.

CLARK HOPKINS

FIELD DIRECTOR OF THE YALE EXCAVATIONS AT DURA

#### A "PALIMPSEST" ON AN EGYPTIAN MASTABA WALL<sup>1</sup>

For over thirty years there have been exhibited in the Egyptian galleries of the Museum of Fine Arts, Boston, the chapels of two mastaba tombs of the Fifth Dynasty, acquired from the Egyptian Government by purchase out of the Sears Fund. One of these (Reg. No. 04.1761) is from the tomb of Ka-m-nofret at Sakkara 2 and has been studied and partially published by various scholars.2 The north wall of this chapel shows a papyrus thicket with scenes of fowling and fishing, the papyrus harvest, and rope-making, together with a large figure of the owner hunting birds from a papyrus skiff. Below this are three registers of offering bearers which were never finished, and are for the most part painted only (Figs. 1-3). My attention has been drawn to this wall for some time by the fact that a portion of the scene has been altered and a second scene carved over it, and this alteration has seemed to me worthy of special study and notice. I accordingly asked Miss Elizabeth Eaton of our staff in Boston to make a careful hand copy of the portion of the wall where these superimposed scenes occur, since photographs were inadequate to show the details, and this copy is reproduced in Figure 5. 4 Figure 4 (upper part) is a drawing of the rope-making scene in the third register from the top, below which the alterations commence. Figures 4 (lower part) and 6 are tracings from Figure 5 for the purpose of making clear the two scenes which have been superimposed; Figure 4 (lower), registers 4 and 5, is the first version of the scene below that of the ropemakers, while Figure 6 depicts the totally different scene which was, at a later time, carved on this area, continuing to a lower point on the wall.

As will be seen from the photographs (see Fig. 1, also Fig. 7), the left side of the wall in its upper part is occupied by the papyrus thicket (the photograph omits a small portion of this thicket on the left), among the stems and blossoms of which may be seen birds of various kinds, while above it others are depicted in agitated flight. Among these flying birds is a dragon-fly, or possibly a flying grasshopper. To the right of the thicket, in the upper register, three men are depicted carrying off fish which they have caught in the swamp. The legend above them reads: "Coming forth from the papyrus swamp . . ." <sup>5</sup> The first of the three men carries a bird in his left hand, and suspended from a pole borne on the right shoulder is a sack containing two fish. The second man strides along with a pole across his shoulders from which are suspended two box-like containers holding fish, while the third has two fish hanging from a stick over his right shoulder and a third suspended from a loop of rope in his left hand. In the second register there are also three men. The two first walk off to the right bearing on their backs heavy bundles of papyrus stalks, which, however, are not so burdensome as to prevent the first man from

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<sup>&</sup>lt;sup>1</sup> I am much indebted to Mr. Battiscombe Gunn for his kindness in looking over the Ms. of this study, and for a number of valuable suggestions.

<sup>&</sup>lt;sup>2</sup> Mariette, Mastabas, D 23. <sup>3</sup> Porter and Moss, Topographical Bibliography, III, p. 115. 
<sup>4</sup> Scale approximately 13: 100. In addition to making the drawings here published, Miss Eaton has given valuable assistance in the looking up of references.

<sup>&</sup>lt;sup>4</sup> After this only the preposition r remains of the continued text.



Fig. 1.—North Wall from Tomb of Ka-m-nofret, Boston Museum of Fine Arts



Fig. 2.—The Owner of the Tomb Hunting Birds

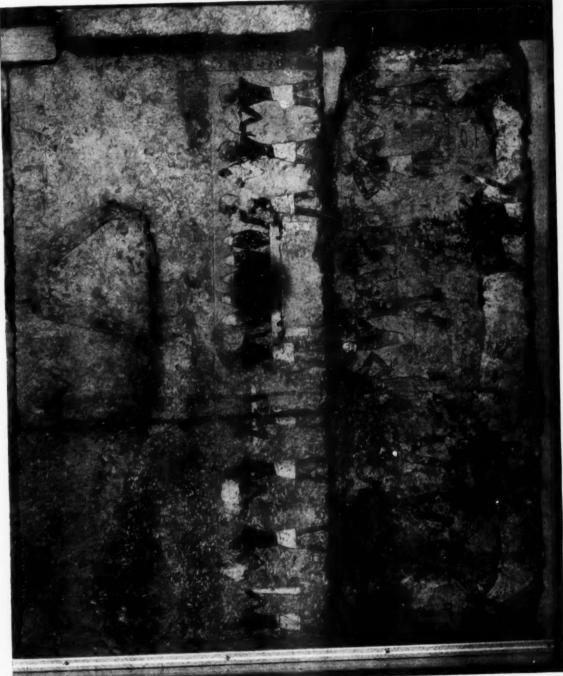


FIG. 3.—OFFERING BEARERS

grasping a bird by its wings in his right hand, while his left holds the load in place with the aid of a rope. The third man faces left and is engaged in plucking one of the papyrus stalks from the thicket. There is no text to accompany this register. The third register (shown in outline in Figure 4 [upper]) is divided into two scenes.

Fig. 4.—Present Condition of Register 3; First Version of Registers 4 and 5

In the upper two men sit facing each other engaged in sorting out lengths of papyrus-fibre for rope-making. They hold two strips between them, while at their feet lies a neatly sorted pile of strands awaiting the next stage of the process. To the right is represented a coil of rope. The legend above I would translate "pulling out papyrus-fibre." 1 The lower scene in the third register shows a further stage in the process of rope-making. On the left a man sits on the ground with a bundle of prepared strands beside him. These he "feeds" with his hands into the rope which is being twisted by the man standing at the right. Similar scenes are well known in tombs of the period,2 and from comparison with them it is probable that, in the gap formed by the break in the stone, there was a weight attached to the rope, which, by the momentum

"The verb \(\subseteq \) is given in Erman-Grapow, Wörterbuch III, 486, as occurring in Pyr. and O. K. with the meaning "to pluck papyrus." I had at first, with Gunn, considered it possible that this legend might refer to the scene of papyrus harvest above, but on a recent visit to Egypt I noted an occurrence of the word in the legend of a parallel scene, which makes it clear that we were in error. In the Fourth Dynasty tomb of Meresankh III in Dr. Reisner's East Cemetery at Giza, on the east wall of the main chamber, just north of the entrance doorway, is a scene of mat-making which can with difficulty be made out in fig. 8 of Reisner's article, "The Tomb of Meresankh," in Museum of Fine Arts (Boston) Bulletin, no. 151, p. 69. Here two men sit facing each other upon a mat with the legend \(\subseteq \frac{1}{2} \subseteq \subseteq \subseteq \subseteq \frac{1}{2} \subseteq \subseteq

<sup>2</sup> For example, Davies, Ptahhetep, I, pl. XXV.

of its rotation, assisted in the twisting process. At the upper left is a coil of rope, as in the previous scene, and the legend reads, "twisting papyrus-fibre." <sup>1</sup>

Below the third register the scenes become illegible in photographs, but the two succeeding registers are recorded in Figure 4 (lower). They belong to the original series of scenes, which were in part sacrificed to make room for the later representations which I shall discuss below. In the second register we saw the gathering of papyrus-stalks, and in the third the making of rope. In the fourth register these two materials are shown being combined in the manufacture of a papyrus skiff. At the left stands the foreman leaning on his staff and directing the labor of four boatbuilders. These are shown in the partly finished skiff, three of them drawing tight the rope lashings which bind the bundles of stems together, and the fourth standing amidships with a coil of rope in his left hand (partly destroyed), ready to supply fresh material to the workman in the bow. There is great vigor and sense of motion in the figures of the boat-builders, which contrast admirably with the quiescent watchfulness of the overseer. It was not thought necessary to explain this scene with a legend. The fifth and last register of the original design is less well preserved than those above it, but sufficient remains to make its general character clear. On the right is a fisherman extracting a fish from a type of small hand net which is well known from other representations.<sup>2</sup> It consists of a net-bag (traces of the painted meshes are still visible) mounted on a pair of sticks which form a fork. Above the figure is the word Hwd, possibly "rich," referring to the quality of the catch, but more probably a short form of a word meaning "a kind of fisherman." 3 To the left two fishermen facing in the opposite direction are busy at their task, but whether they are handling the same type of hand nets, or are occupied with the ropes of a large seine, is not to be determined from the picture. Above the man in the center, however, are two hieroglyphs which are perhaps the last elements in the Egyptian word for a seine.4 It is not clear whether the three men in this register are represented as standing on a boat or on land, and fishing scenes occur in both settings, but the contour of the line in part traceable under their feet suggests a boat. This interpretation is especially tempting since we may consider the boat which is being constructed in register 4 as being made practical use of in this scene.

The bottom of the fifth register appears to mark the limit to which the first

<sup>1</sup> Supply a quite certainly under \_\_\_\_.

<sup>&</sup>lt;sup>2</sup> See Klebs, Reliefs des Alten Reiches, Abb. 61, and further references there given.

<sup>4 \</sup>lambda i3d.t, see Wb. sub. voc., and the legend over the seining scene in Davies, Deir el Gebrawi, I, pl. IV. The det. here omitted as frequently. There is no assurance that this word is intended, however, and the suggestion is put forward with reserve.

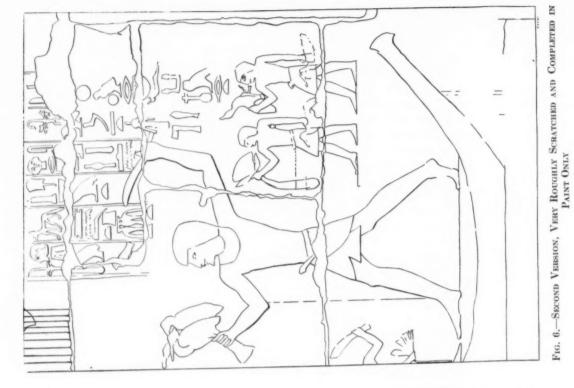
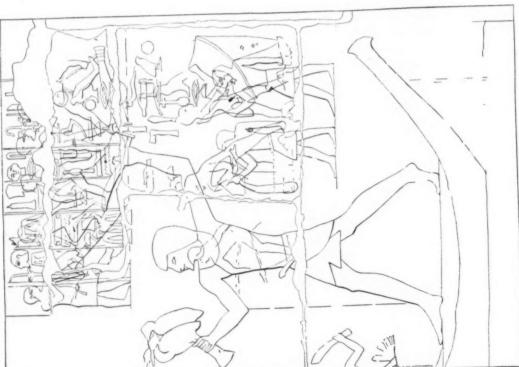
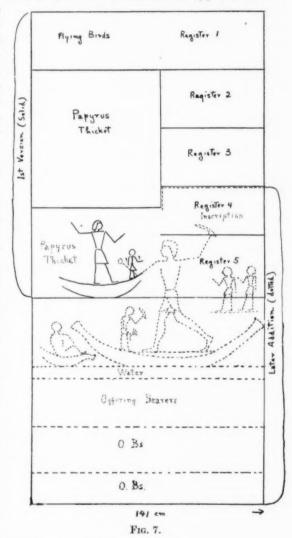


Fig. 5.—Present Condition, Two Versions Superimposed



version of the decoration of this wall was carried. This original scheme called for the five registers at the right which I have just described, and at the left a representation of a papyrus thicket which extended from the top to about midway of the fourth register (see Fig. 7). The space at the left, below the thicket, and opposite the rest

of register 4 and register 5, was occupied by a figure of Ka-mnofret standing in a skiff and hunting birds with the throwing-stick. This figure faced right, and there was a smaller figure, a son or attendant, standing in the bow and also facing right. The group was never carved but was merely painted in, and only very faint traces of it remain, sufficient to give its general character but not clear enough for reproduction. As is to be commonly observed in the tomb decorations of the Old Kingdom, this original scheme was never fully carried out. Thus, although registers 1 to 3, and perhaps 4 were fully carved in relief and painted, register 5 had its relief only roughed out, and relied largely on its coloring for legibility. Similarly, the birds hovering over the papyrus thicket and the upper part of the thicket itself were finished, but the lower stems of the plants and the incidental figures in that area were only roughly indicated in relief, and the figure of the owner in his skiff below was, as has been said, merely painted. This condition conforms entirely with the usual practice of the Egyptian craftsmen, who regularly



worked from top to bottom in decorating wall surfaces.

At some time subsequent to the execution of the scheme of decoration already described, it was decided to alter a part of the embellishment of this wall of the tomb. The papyrus thicket and the first three registers of scenes were retained, but the fourth and fifth registers were rubbed down to make way for the new decoration.

This rubbing down was but summarily executed, for only the high spots of the relief have been removed, and even the color in the deeply cut portions, such as the . corners of eyes and mouths, still remains. The general appearance of the surface is that of a relief much worn by constant handling. Over this prepared area, and extending to a line considerably below it, the new scene was roughly incised (Fig. 6). The work is crude and apparently hasty, and its effectiveness was dependent largely on painting, traces of which still remain. The principal feature is a large figure of Ka-m-nofret standing in a papyrus skiff and hunting birds with the throwing-stick. He faces to the left and holds his weapon aloft in his left hand in the attitude of throwing. In his right hand he grasps the legs of three birds which have already been captured. In the bow of his skiff is the figure of an attendant facing right and slightly inclined forward in a respectful attitude. He presents a spare throwing-stick to his master with one hand, while in the other he holds a bunch of flowers. This group is a larger and more prominent version of the similar picture under the papyrus thicket in the original version; indeed I think it probable that the entire alteration was made because the owner of the tomb wished to have his likeness figure more prominently in the decoration of the wall, and so discarded the original design in favor of the modification. Beginning over the head of the principal figure and extending nearly to the right edge of the field is an inscription in six columns giving the titles of Ka-m-nofret. Lower down to the right, behind the main figure, and above the stern of the skiff, are two men walking to the left. The first holds a bunch of flowers in his right hand, while his left grasps a bird by the wings. The second figure holds aloft a bird in the right hand and grasps a pair of birds in the left. Finally, to the left of the owner's skiff is a small canoe bearing a single seated figure facing right, perhaps fishing with hook and line. This little group is now but faintly visible, since it was never carved but painted on the wall with a few incised lines only. The decoration of the lower part of the wall consists of three registers of offering bearers (the lowest incomplete) advancing to the left, and forms, I believe, part of the second scheme of decoration. All three of these registers have been painted, and there are a few hastily scratched incised lines in the upper register only. In the second register an indication of the summary completion of the scene is to be observed in the presence of the red construction lines on which the figures

<sup>&</sup>lt;sup>1</sup> This inscription reads: (1)  $Tpj \ hr \ n\acute{s}w.t, \ mdw \ rhj.t,$  (2)  $s\beta b \ [c\underline{d}] \ mr, \ n\acute{s}.t \ hnt.t,$  (3)  $iwn \ knm.t,$  (4)  $hrj \ s\acute{s}t\beta, \ w\underline{d} \ mdw \ n \ \dots$ , (5)  $wr \ (m\underline{d}^g) \ s\acute{m}c, \ hm \ ntr \ m\beta c.t,$  (6)  $im\beta hw \ hr \ nb.f \ k\beta-m-nfr.t.$  These are all well-known titles of the Old Kingdom. Translation, however, presents great difficulties since in many cases we do not yet know the functions associated with them, and literal renderings (indicated by quotation marks) are unsatisfactory. The following is offered tentatively:

<sup>(1) &</sup>quot;Chief under the King," "Staff of the People," (2) Judge and Provincial Governor, "He of the Foremost Seat?", (3) "Pillar of Kenmet," (4) Privy Councillor, "Commander of ———," (5) Greatest of the Tens of Upper Egypt, Prophet of Ma'at (the goddess), (6) in honor with his Lord, Ka-m-nofret.

The second title in the fourth column is incomplete: the end of it, rather curiously, seems to have been bed owing to the proximity of the uplifted hand of the main figure. From analogy with the titles of arring on the great "false-door" in the west wall of this chapel, there is no doubt that the title should read  $\{ \| \text{ the proximity of the fuller form, already carved when it was discovered that space was lacking for the complete title, was probably painted out.$ 

were built. This treatment is entirely in keeping with the hasty execution of the upper portion of the second version, which has already been noted.

To sum up, the history of the north wall of Ka-m-nofret's chapel appears to have been the following. (Cf. Fig. 7.) The original design was carried from the top down to a level corresponding with the bottom of register 5, and was brought to a relatively advanced state of completion, except for the figure in the skiff under the swamp scene, which was merely painted in. At this stage of the work the lower part of the original design was deleted and, beginning with a level corresponding with the bottom of register 3, a new design was laid down. This consisted of the list of titles, the large boating scene with accompanying smaller groups, and the three lowest registers of offering bearers. The entire execution of this second version was hasty and crude; only the upper parts were carved, and that in the most summary fashion, and the lowest registers were completed hastily in paint.

Dows Dunham

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<sup>1</sup> See C. R. Williams, The Decoration of the Tomb of Per-Neb, p. 8, notes 20, 21, and 22.

#### PAINTED POTTERY FROM JEMDET NASR, IRAQ

#### PLATES XXX-XXXVI

#### Introduction

The Field Museum-Oxford University Joint Expedition conducted archaeological excavations on the vast site of the ancient city of Kish, 1922–1933. These ruins lie eight miles due east of the large desolate mounds once famous as the hanging gardens of Babylon. The excavations were conducted under the supervision of Stephen Langdon, Professor of Assyriology at the University of Oxford. During the earlier seasons, Ernest Mackay acted as field director in charge of excavation.

In the early part of 1925, while the Kish excavations were in progress, an Arab brought into camp some painted potsherds and fragmentary tablets with the report

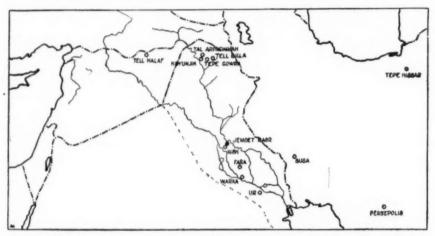


Fig. 1.—Map Showing the Location of Recently Excavated Sites Where Early Painted Pottery Has Been Found

that they had been found on a low mound some twenty miles distant. This was an important discovery, since painted pottery of this type had not been unearthed in central Iraq up to that time. On March 26, accompanied by the Arab, Mr. Mackay visited the small, low mound called Jemdet Nasr, where the painted potsherds had been found. The site was easily identified because of the monochrome and polychrome fragments which were scattered over the surface of the mound.

During the following winter season Dr. L. H. Dudley Buxton and I visited Kish for several weeks in order to study human skeletal remains and to make anthropometric observations on the modern Arab population. It was at this time that Professor Langdon decided to drive some trial trenches into the mound at Jemdet Nasr, and we were fortunate in having the opportunity to visit that site. Professor Langdon hoped to find complete painted jars, inscribed stones and tablets, and other

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archaeological material which would throw new light on the ancient civilization which flourished between the Tigris and Euphrates Rivers long before the dawn of the Christian era.

Jemdet Nasr lies eighteen miles northeast of Kish. This distance over a rough desert track, the absence of water in the vicinity, and the constant danger of attack from wandering Beduins and greedy Arabs, made excavation difficult. In the early part of January, 1926, a reed mat hut was erected near the mound to form the nucleus for a temporary camp, and thirty Arab workmen began excavations. Professor Langdon drove by automobile from Kish each day to supervise the work. Water and food for the workmen were also transported daily in this manner.

Shortly after the excavations were begun, walls of small rooms were found, and I was fortunate to be present on January 6 when the first complete painted jar was unearthed. Later in the same afternoon four other jars were discovered lying close together in one corner of a room. At the end of three months Professor Langdon had found a small number of complete jars, hundreds of fragments of painted pottery, pictographic tablets in linear script, cylinder seals of archaic form, and unpainted pots of various types. Part of this material has been described by Langdon and Mackay (see bibliography).

Owing to the difficulty of excavating this site, no further work was done at Jemdet Nasr until 1928, when Mr. Louis Charles Watelin, who had replaced Mr. Mackay as field director, decided to continue the work there. This special project was financed by Mr. Henry J. Patten of Chicago. Mr. Watelin closed the excavations at Kish and on March 13 moved 120 workmen to Jemdet Nasr, where they constructed reed mat shelters. Following the heavy spring rains, water was obtained from a large kesserah or catchment basin located about a thousand paces from the camp. Mr. Eric Schroeder and I acted as assistants to Mr. Watelin.

A small number of complete painted jars and thousands of sherds were excavated, together with other material similar to that discovered by Professor Langdon in 1926. Among the more important new discoveries were some fragmentary human skeletons, which occupied my special attention and care. Remains of six individuals came to light, but the dampness of the soil and their proximity to the surface of the ground made their preservation impossible. In the case of skeleton J. N. 4, however, I was able to examine and measure a partially complete skull which was found at a depth of one and a quarter meters. The cephalic index, between 60 and 65, proved that this individual belonged, without question, to a hyper-dolicocephalic group. This skeleton, associated with painted pottery fragments, could not have been an intrusive burial. The discovery is of paramount importance, since it is the only skull yet recorded in direct association with the painted ware of Jemdet Nasr (see bibliography).

After division with the Iraq Department of Antiquities, the painted pottery fragments which were the share of Field Museum were shipped to Chicago. Some of the jars have been restored by the skillful hands of T. Ito and his son Howard.

The drawings and detailed descriptions of this new material, prepared during 1932 by Mr. Richard A. Martin, are presented in the following article. Henry Field Museum of Natural History, Chicago

#### DESCRIPTION OF PAINTED POTTERY FROM JEMDET NASR

RECENT excavations of the lower levels in Iraq and the consequent marked interest in the lately designated three proto-historic periods, make it desirable to add to the publication of the painted vessels and sherds from this site, the name of which, Jemdet Nasr, has been adopted for the third or latest period. The map on page 310 shows the location of recent excavations where early painted pottery has been found.

The painted pottery here described and illustrated is from the second season's excavation and represents only new designs or types not shown in Mr. Ernest Mackay's report. In order to facilitate comparisons with the already published material, Mr. Mackay's types and terminology have been adhered to wherever practicable.

In addition to the designs illustrated, there are fragments of a large pot bearing indications of the colonnade design in dark brown on coarsely made buff ware.

The bowls (rim types shown on Pl. XXXVI, figs. 36-41) were all red wash on the outside, with the exception of one sherd showing geometric design in light red on the outside below the maximum body diameter.

One bottom fragment of a small vessel with a nearly flat base occurs with the entire outside incised. These incisions are small and close together and perhaps should be termed striations. On the side the design is diagonal from left downward to right. On the bottom, a series of concentric circles forms the margin of a small area of parallel striations.

All sherds are from wheel-turned vessels.

The rims and handles illustrated on Pl. XXXVI represented only the types actually found on the Jemdet Nasr sherds in the collection of the Field Museum. By far the greatest portion of the painted pottery falls into two types: those vessels with overhanging rims and often bearing rounded protuberances, and those with carinated rims and lug handles.

No other types of bases were found than the ring, flat, rounded and pointed, shown in the drawings of the assembled pots.

#### 1. (Pl. XXX) Polychrome—Type F

| Height    |    |         | 153 | mm. |
|-----------|----|---------|-----|-----|
| Diameter  | of | orifice | 96  | 64  |
| 66        | 44 | body    | 238 | 64  |
| 66        | 44 | bottom  | 123 | **  |
| Thickness | of | rim     | 18  | 44  |
| 44        | 64 | neck    | 6   | 66  |
| 84        | 66 | body    | 10  | 64  |
| 66        | 66 | base    | 7   | 44  |

Wheel turned

Rim: Overhanging

Bottom: Ring

Handle: Four small knob-like protuberances equally spaced about upper shoulders

Texture: Medium

Finish: Two slips; red slip covers entire outside of vessel with exception of broad band of cream slip encircling pot from just below neck to maximum body diameter, covering most of shoulders. It seems

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likely that the red slip on the upper portion and a band just below the cream slip were highly polished in contrast to the lower red slip portion, accounting for the darker and more brilliant plum color of the upper area.

Decoration: A narrow incised band just below the neck and forming upper limit of cream slip. Geometric design in dark brown on cream slip consisting of two cross-hatched panels separated by broad vertical band for each segment formed by the handles—below each knob. The segments are separated by three broad vertical bands.

#### 2. (Pl. XXX) Polychrome—Type F

| 210 | mm.                               |
|-----|-----------------------------------|
| 96  | 66                                |
| 254 | 66                                |
| 138 | 4.6                               |
| 22  | 44                                |
| 6   | 64                                |
| 10  | 66                                |
| 10  | 6.6                               |
|     | 96<br>254<br>138<br>22<br>6<br>10 |

#### Wheel-turned

Rim: Overhanging

Bottom: Ring, but poorly done, as base protrudes below ring

Handles: Four small knob-like protuberances equally spaced about upper shoulders

Texture: Medium

Finish: Two slips, similar to No. 1, although the red may have been lighter in color.

Decoration: A narrow incised band below neck and forming upper limit of cream slip. Geometric design; difficult to distinguish owing to loss of color, on cream slip for each of four segments, separated below the handles by broad vertical stripes of dark red.

#### 3. (PL. XXX) UNDECORATED-TYPE F

| Height   |      |         | 154 | mm. |
|----------|------|---------|-----|-----|
| Diameter | r of | orifice | 96  | 66  |
| 66       | 66   | body    | 208 | 66  |
| 66       | 66   | base    | 96  | 66  |
| Thicknes | s of | rim     | 18  | 66  |
| 66       | 44   | neck    | 6   | 64  |
| 44       | 66   | body    | 10  | 44  |
| 66       | 66   | base    | 9   | 66  |

Wheel turned

Rim: Overhanging

Bottom: Flat, but pinched out

Handles: None Texture: Medium

Finish: Plum red slip covers entire outside of vessel, including base, and carries down well inside rim.

Decoration: None.

#### 4. (Pl. XXX) Polychrome—Type F

| Height    |    |         | 136 | mm. |
|-----------|----|---------|-----|-----|
| Diameter  | of | orifice | 78  | 66  |
| 66        | 66 | body    | 160 | 44  |
| 66        | 66 | bottom  | 74  | 66  |
| Thickness | of | rim     | 15  | 44  |
| 66        | 66 | neck    | 6   | 66  |
| 4.6       | 66 | body    | 10  | 46  |
| 6.6       | 66 | base    | 8   | 66  |
|           |    |         |     |     |

Wheel turned

Rim: Overhanging Bottom: Flat

Handles: None Texture: Medium

Finish: Red wash on lower body and base; upper portion of vessel wet-smoothed.

Decoration: Plum red band on upper rim surface, red on inside of neck; dark brown band at base of neck which, with browned incised band third way down shoulder, form limits of upper design, and are filled with triangles, apex up, outlined in brown and alternately filled with solid red and cross-hatched brown; an equal distance below, another brown incised band. This lower ring may have been a duplicate of the upper triangle-filled one, but the color is not sufficiently preserved to be certain.

#### 5. (Pl. XXX) Polychrome—Type B

| Height    |    |         | 174 | mm. |
|-----------|----|---------|-----|-----|
| Diameter  | of | orifice | 144 | 44  |
| 66        | 66 | body    | 266 | 6.6 |
| 6.6       | 66 | bottom  | 186 | 66  |
| Thickness | of | rim     | 11  | 44  |
| 66        | 66 | neck    | 6   | 46  |
| 66        | 64 | body    | 10  | 66  |
| 66        | 66 | bottom  | 12  | 6.6 |

Wheel turned Rim: Carinated

Bottom: Slightly rounded, flat

Handles: Four lugs equally spaced about upper shoulder, perforated horizontally

Texture: Medium

Finish: Wet-smoothed, dark buff ware.

Decoration: Two narrow incised bands encircling middle shoulder and connecting lugs; above is a band of dark brown. Design panel covers most of pot body, and is enclosed at top by dark brown band, and at bottom, followed by a red band. Geometric design consisting of four triangles, apex at center, the side ones hollow and red outlined, and the top and bottom ones outlined and cross-hatched in dark brown. This "unit" alternates with one similar, but with the red triangles placed at top and bottom, and the cross-hatched ones at the side.



#### 6. (PL. XXX) UNDECORATED—TYPE B

| Height    |     |         | 500 | mm. |
|-----------|-----|---------|-----|-----|
| Diameter  | of  | orifice | 96  | 66  |
| 6.6       | 66  | body    | 240 | 6.6 |
| 6.6       | 66  | bottom  | 140 | 64  |
| Thickness | of  | rim     | 10  | 6.6 |
| 64        | 66  | neck    | 6   | 64  |
| 6.6       | 6.6 | body    | 10  | 4.4 |
| 6.6       | 66  | bottom  | 9   | 66  |

Wheel turned Rim: Carinated

Bottom: Slightly rounded, flat

Handles: Four lugs, equally spaced about upper shoulder, perforated horizontally

Texture: Medium

Finish: Plum red slip covers entire outside of vessel and carries down inside rim.

Decoration: Narrow incised band encircling upper shoulder and joining lugs.

#### 7. (Pl. XXX) Monochrome—Type B

Rim: Carinated

Bottom: Slightly rounded; flat

Handles: Four lugs equally spaced about upper shoulder, perforated horizontally

Texture: Medium
Finish: Wet-smoothed

Decoration: Narrow incised band encircling upper shoulder and connecting lugs, above this is a narrow plum red band, and below each lug are three vertical stripes from shoulder to well down on body in the same color. This is also repeated between each segment as formed by the handles.

#### 8. (PL. XXX) UNDECORATED—TYPE B

Height 110 mm. Diameter of orifice 86 " 172 " " body " bottom 69 " 7 " Thickness of rim 8 4 " neck " body 8 " base 8

Wheel turned

Rim: Carinated

Bottom: Flat

Handles: Four lugs equally spaced about upper shoulder, perforated horizontally

Texture: Medium

Finish: Wet-smoothed buff ware.

Decoration: Narrow incised band encircling upper shoulder and connecting lugs.

#### 9. (PL. XXX) UNDECORATED-TYPE B

Height 110 mm. 27 " Diameter of orifice 140 " " body " bottom X 5 " Thickness of rim " neck 5 " 66 66 " body 6 " bottom X

Rim: Rounded edge

Bottom: Rounded

Handles: Three lugs, spaced equilaterally with spout about upper shoulder, lugs perforated hori-

zontally

Texture: Medium

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Finish: Red slip covers outside of vessel and carries well down inside rim.

Decoration: None.

Spout fashioned in form of lug handles and spaced equilaterally about upper shoulder with them.

#### PLATE XXXI, POLYCHROME—TYPE B

| Height    |              |         | X mm.        |     |  |
|-----------|--------------|---------|--------------|-----|--|
| Diameter  | of           | orifice | 154          | 6.6 |  |
| 6.6       | 44           | body    | 326          | 44  |  |
| 66        | 6.6          | bottom  | $\mathbf{X}$ | 44  |  |
| Width of  | Width of rim |         |              |     |  |
| Thickness | of           | body    | 8            | 4.6 |  |
| 4.4       | 66           | bottom  | X            | 6.6 |  |

Rim: Carinated

Bottom: Probably flat

Handles: Four horizontally perforated lugs, equally spaced about upper shoulder

Texture: Medium, buff ware

Finish: Wet-smoothed

Decoration: A narrow incised band on lower neck joining lugs. Design panel in dark brown and red encircles upper body, and consists of naturalistic figures separated by segments of simple geometric character. The figures represented are two scorpion panels; two with an eye; one with two suspended fish; one with an unidentified representation; one with two birds, the larger bird having a fish suspended in its bill; and finally two panels each containing a gazelle with suckling young.

NOTE.—This vessel, and the sherds Pl. XXXIV, Nos. 1, 4, 7, 8 and 9, may be added to the two pots of "Susa II" type found at Ur<sup>1</sup> and Tello,<sup>2</sup> and are, if anything, more Iranian in design than the previously known Mesopotamian examples.

#### UNDECORATED-TYPE F

|            |                 |       |       | CADECORATEI    | TIPET      |      |             |       |                      |
|------------|-----------------|-------|-------|----------------|------------|------|-------------|-------|----------------------|
| 1. (PL. X  | XXII)           |       |       |                | 2. (PL. X  | XX   | <b>II</b> ) |       |                      |
| Height     |                 | 232   | mm.   |                | Height     |      |             | 170   | mm.                  |
| Diamete    | er of orifice   | 100   | 6.6   |                | Diamete    | r of | orifice     | 94    | 44                   |
| 66         | " body          | 194   | 66    |                | 6.6        | 66   | body        | 154   | 44                   |
| 66         | " bottom        | 84    | 64    |                | 6.6        |      | bottom      | 71    | 44                   |
| Thickne    | ess of rim      | 18    | 44    |                | Thicknes   | ss o | f rim       | 14    | 44                   |
| 66         | " neck          | 6     | 4.6   |                | 44         | **   | neck        | 6     | 44                   |
| 86         | " body          | 8     | 44    |                | 66         | 44   | body        | 8     | 66                   |
| 44         | " bottom        | 7     | 66    |                | 44         | 6.6  | bottom      | 7     | 44                   |
| Wheel to   | urned           |       |       |                | Wheel to   | irne | d           |       |                      |
| Rim: Ov    | verhanging      |       |       |                | Rim: Ov    | erh  | anging      |       |                      |
| Bottom:    | 0 0             |       |       |                | Bottom:    |      | 0 0         |       |                      |
| Handles    | : None          |       |       |                | Handles:   |      | 0           |       |                      |
| Texture:   | Medium          |       |       |                | Texture:   | Me   | dium        |       |                      |
| Finish:    | Light red slip  | , poo | rly a | pplied, covers | Finish: 1  | igh  | t red slip  | cover | s outside of vessel. |
| outside of |                 |       |       |                | Decoration | 4.5  |             |       |                      |
| Decoration | on: None.       |       |       |                |            |      |             |       |                      |
| 3. (PL. X  | XXII) Monoc     | HROM  | е—Т   | YPE F          | 4. (PL. XX | (X)  | I) UNDEC    | ORATE | D-TYPE?              |
| Heigh      | t               | 14    | 2 mm  | 1.             | Height     | t    |             | 13    | 0 mm.                |
| 0          | eter of orifice | 8     | 4 "   |                | Diame      | ter  | of orifice  | 50    | 0 "                  |
| 64         | " body          | 14    | 1 "   |                | 4.6        |      | " body      | 139   | 2 "                  |
| 6.6        | " bottom        | 7     | 0 66  |                | 66         |      | " bottom    | 7     | ζ.                   |
| Thick      | ness of rim     | 1     | 6 "   |                | Thickr     | iess | of rim      | 1     | 4 "                  |
| 66         | " neck          |       | 6 "   |                | 66         |      | " neck      | (     | 6 "                  |
|            |                 |       |       |                |            |      |             |       |                      |

<sup>1</sup> Antiquaries Journal, Vol. IX, Pl. XXII, No. 1. <sup>2</sup> Nouvelles Fouilles de Tello, p. 310, fig. 20.

Thickness of body 8 mm.
" "bottom 7 "
Wheel made
Rim: Overhanging
Bottom: Ring
Handles: None
Texture: Fine

Finish: Light reddish buff slip covers outside of

Decoration: Light red cross-hatch on body from shoulder to bottom (similar design to Alishar III "smelter" ware).

#### 5. (PL. XXXII) INCISED-TYPE ?

| 1 | Height    |     |         | 123 | mm. |
|---|-----------|-----|---------|-----|-----|
| 1 | Diameter  | of  | orifice | 49  | 6.6 |
|   | 66        | 6.6 | body    | 131 | 66  |
|   | 66        | 64  | bottom  | X   |     |
| 7 | Chickness | of  | rim     | 16  | 44  |
|   | 44        | 66  | neck    | 6   | 66  |
|   | 44        | 66  | body    | 6   | 66  |
|   | 64        | 6 6 | bottom  | 5   | 6.6 |

Wheel made
Rim: Beveled edge
Bottom: Rounded
Handles: None

Texture: Rather fine clay

Finish: Red slip covers entire outside of vessel with exception of upper rim surface, which is wetsmoothed light buff.

Decoration: Two bands of small incised chevrons on upper rim surface.

#### 7. (Pl. XXXII) Undecorated—Type ? (New)

| Height  |       |         | 235          | mm. |
|---------|-------|---------|--------------|-----|
| Diamete | er of | orifice | 70           | 6.6 |
| 6.6     | 66    | body    | 108          | 66  |
| 66      | 66    | bottom  | $\mathbf{X}$ |     |
| Thickne | ss of | rim     | 7            | 44  |
| 66      | 44    | neck    | 4            | 64  |
| 66      | 66    | body    | 6            | 66  |
| 66      | 66    | bottom  | 15           | 6.6 |

Wheel made Rim: Beaded Bottom: Pointed Handles: None Texture: Medium Thickness of body 8 mm.
" bottom 8 "

Wheel made
Rim: Beveled edge
Bottom: Rounded
Handles: None
Texture: Fine

Finish: Light red slip. Decoration: None.

Note.—This and No. 5 (Pl. XXXII) were mortuary gifts with skeleton J.N. 2,1 one being found on each side of the skull. The skeleton was in the right lateral flexed position. Pottery of this period has been found associated with burials at Ur and Fara. It is possible that these two vessels may represent a later phase of the Jemdet Nasr period,

#### 6. (PL. XXXII) UNDECORATED-TYPE F

| Height    |    |         | 168 | mm. |
|-----------|----|---------|-----|-----|
| Diameter  | of | orifice | 50  | 66  |
| 44        | 66 | body    | 120 | 44  |
| 44        | 66 | bottom  | 25  | 66  |
| Thickness | of | rim     | 12  | 66  |
| 66        | 66 | neck    | 4   | 66  |
| 66        | 66 | body    | 10  | 44  |
| 6.6       | 66 | bottom  | 12  | 6.6 |

similar to the pink ware of Ur.

Wheel made Rim: Overhanging Bottom: Truncated, flat

Handles: None Texture: Medium

Finish: Plum red slip covers outside of vessel and carries well down inside rim.

Decoration: None.

<sup>&</sup>lt;sup>1</sup> "Human remains from Jemdet Nasr, Mesopotamia" by Henry Field, Journal Royal Asiatic Society, London, October, 1932, pp. 967-970.

Finish: Red slip covers outside of vessel.

Decoration: A small plain moulding encircles upper neck of vessel.

#### 1. (PL. XXXIII) MONOCHROME-TYPE A

| Height    |     |         | 312 mm. |     |
|-----------|-----|---------|---------|-----|
| Diameter  | of  | orifice | 163     | 4.4 |
| 44        | 66  | body    | 364     | 44  |
| 64        | 66  | bottom  | 102     | 66  |
| Thickness | of  | rim     | 18      | 44  |
| 66        | **  | neck    | 8       | 66  |
| 6.6       | 66  | body    | 10      | **  |
| 6.6       | 6.6 | bottom  | X       |     |

Wheel made

Rim: Ledge

Bottom: Flat

Handle: One inverted U laterally attached on upper shoulder and opposite spout

Texture: Medium

Finish: Wet-smoothed.

Decoration: Broad bands encircling pot on upper shoulder and body line, upper joining handle and spout. Four elements of three inverted semicircular bands standing on lower stripe. These are equilaterally spaced, under handle and spout and on other two sides. Band at mouth and base of spout. All decoration in dark brown.

Stubby spout, 40 mm. long and 34 mm. in diameter, attached on upper shoulder.

#### 2. (Pl. XXXIII) MONOCHROME, INCISED-TYPE A

| H | leight |       |         | 206 | mm. |
|---|--------|-------|---------|-----|-----|
| D | iamet  | er of | orifice | 108 | 6.6 |
|   | 64     | 66    | body    | 224 | 4.6 |
|   | 6.6    | 6.6   | bottom  | 90  | 66  |
| T | hickne | 10    | 6.6     |     |     |
|   | 6.6    | 64    | neck    | 6   | 66. |
|   | 44     | 66    | body    | 8   | 66  |
|   | € €    | 44    | bottom  | 6   | 64  |

Wheel made

Rim: Beveled edge

Bottom: Flat

Handle: None

Texture: Medium

Finish: Wet-smoothed buff ware.

Decoration: Two mouldings, one on upper shoulder meeting spout and other at maximum body diameter, encircling vessel, and a short vertical moulded strip joins spout to lower one. Both bear incised chevrons. Design in light red. Band at base of neck, one above and below upper moulding, and one above lower moulding. Between mouldings are vertical stripes of two wavy lines, seven pairs, and below spout a pair of three straight stripes, each with a rough six-pointed "star" on each side.

Short conical truncated spout, 34 mm. long and 18 mm. in diameter at upper shoulder.

Mortuary gift with skeleton J.N. 3.

#### 3. (Pl. XXXIII) MONOCHROME—TYPE D

| Height   |    |         | 204 | mm. |
|----------|----|---------|-----|-----|
| Diameter | of | orifice | 116 | 64  |
| 4.6      | 66 | body    | 236 | 66  |
| 64       | 44 | bottom  | 86  | 66  |
| Width of | 12 | 64      |     |     |

Thickness of body 7 mm.
"bottom 6"

Rim: Ledge Bottom: Flat

Handle: Broad strap handle attached on shoulder

Texture: Medium
Finish: Wet-smoothed

Decoration: In dark brown, two broad bands with diagonal ladder fill encircle vessel at shoulder line; on each side of upper shoulder opposed to handle are crude five-pointed stars.

#### PLATE XXXIII

- 4. Naturalistic tree or shrub in dark brown on buff ware. Shoulder sherd.
- 5. Design in red on reddish ware. Shoulder sherd.

#### POLYCHROME SHERDS, PLATE XXXIV

- Plum red and black vertical bands with cross-hatch and lozenges alternately red filled. Reddish ware.
- 2. Plum red and black on light buff. Upper shoulder sherd. Reddish ware.
- Shoulder sherd in red and dark brown on buff. The two naturalistic figures probably represent eyes.
   Buff ware.
- Purple and light red on well polished buff slip. Ware rather finer in texture than usual. Reddish ware.
- 8. Lower shoulder sherd in plum red and black. Feet and portion of body of red winged bird at right. This is probably the bottom of the design panel of the other double are and bird sherds illustrated in Nos. 3, 5, 6. Reddish ware. The upper portion of No. 5 is illustrated in Mackay, Pl. LXIX, Fig. 3, and is inadvertently called "probably an antelope" through lack of sufficient fragments, which were later found.
- 9. Checker board, cross-hatch and vertical bands in dark red and light yellowish brown, Buff ware.
- 10. Design panel of a large vessel with four unperforated lug handles. Panel repeated four times about shoulder and between lugs. Dark brown, plum red, and cream. Reddish ware.

#### MONOCHROME SHERDS, PLATE XXXV

- 1. Body sherd of large vessel with stepped triangles and bands in yellowish brown. Buff ware.
- 2. Lozenges and bands in dark brown, Buff ware.
- 3. Dark brown on buff ware.
- Lug handle sherd. Dark brown on buff ware. Figure at right may represent portion of tree (Plate XXXIII, Fig. 4).
- 5. Conventionalized tree (sketch inverted) and bands in dark brown, Buff ware.
- 6. Cross and cross-hatch in plum red on reddish ware.
- 7. Rim sherd, buff ware. Design in dark purplish brown.
- 8. Rim sherd, plum red on reddish ware.
- 9. Vertical waves in dark brown on buff ware.
- 10. Conventionalized "tree" laid horizontally in light brown. Reddish ware.
- 11. Lug handle sherd, dark brown on buff ware.
- 12. Upper shoulder sherd, Incised moulding. Black on buff ware.
- 13. Fragment of large buff vessel. Incised moulding, checkerboard and bands in dark brown.

#### JEMDET NASR BIBLIOGRAPHY

- Field, H.—"Field Museum-Oxford University Joint Expedition to Kish from 1923 to 1929," Field Museum Anthropology Leaflet, No. 28, Chicago, 1929.
- <sup>1</sup> These bird progressions are suggestive of the "highland culture" as found in Hissar I (Schmidt, Plate LXXXVIII), and from the north of Billa 7 (Speiser, Mus. J., XXIII, No. 3).

"The Field Museum-Oxford University Expedition at Kish," Art and Archaeology, XXXI, 1931, pp. 243-52 and 323-34.

"Ancient Wheat and Barley from Kish, Mesopotamia," American Anthropologist, XXXIV, No. 2, pp. 303-9.

"Human Remains from Jemdet Nasr, Mesopotamia," Journal of the Royal Asiatic Society, London, October 1932, pp. 967-70.

"The Cradle of Homo Sapiens," A.J.A., XXXVI, 1932, pp. 426-30.

"The Antiquity of Man in Southwestern Asia," American Anthropologist, XXXV, 1933, pp. 51-62.

Langdon, S.—"Pictographic Inscriptions from Jemdet Nasr Excavated by the Oxford and Field Museum Expedition," Oxford Editions of Cunciform Texts, VII, Oxford 1928.

"Ausgrabungen in Babylonien seit 1918," Der Alte Orient, 26, 1928, pp. 67-75.

Mackay, D.-"Painted Potsherds," The English Review, July 1927, pp. 81-9.

Mackay, E.—"Report on Excavations at Jemdet Nasr, Iraq," Field Museum Anthropology Memoir Series, Vol. I, No. 3, Chicago, 1931.

#### REFERENCES TO ANCIENT SITES

KOYUNJIK. R. Campbell Thompson, Illus. London News, July 16, 1932, Liverpool Annals of Archaeology and Anthropology, 1931, Vol. 18, p. 103.

TAL ARPACHIYAH. M. E. L. Mallowan, Illus. London News, May 13 and Sept. 16, 1933.

TELL BILLA. E. A. Speiser, Museum Journal, Vol. XXIII, No. 3.

TEPE GAWRA. Bull. American Schools of Oriental Research, No. 48, Dec. 1932.

TELL HALAF. Max Freiherr von Oppenheim, Der Tell Halaf, Leipzig, 1931.

TEPE HISSAR, E. F. Schmidt, Museum Journal, Vol. XXIII, No. 4.

WARKA. J. Jordan, Abhandlungen der Preussischen Akademie der Wissenschaften, Philosophisch-Historische Klasse, Berlin, No. 7, 1929; No. 4, 1930; No. 2, 1932; Arnold Nöldeke, No. 6, 1932.

UR. C. Leonard Woolley, Museum Journal, XXI, pp. 81 ff., Antiquaries Journal, IX, Oct. 1929, pp. 305 ff. Plate XXII, No. 1.

FARA. E. F. Schmidt, Museum Journal, XXII, pp. 193 ff.

TELLO. Cros, Nouvelles Fouilles de Tello, Paris 1910, p. 310, fig. 20.

#### GENERAL PROTO-HISTORIC RELATIONSHIPS OF IRAQ

Speiser, E. A.—A.J.A., 1932, pp. 465-71.

Frankfort, H.—Archaeology and the Sumerian Problem. Oriental Institute of the University of Chicago. Studies in Ancient Oriental Civilization, No. 4, 1932.

Watelin, L. C.—"Essai de Coordination des periodes archaïques de la Mesopotamie et de l'Elam," L'Anthropologie, XLI, 1931, p. 265.

RICHARD A. MARTIN

#### TELL EL-HAMMEH

#### PLATES XXXVII-XXXVIII

On November 22, 1932, soundings were made at Tell el-Ḥammeh on behalf of the American School of Oriental Research, Jerusalem, by Professor Clarence S. Fisher and the writer, with the assistance of Mr. A. Henry Detweiler, who has drawn the plans and the sherds. El-Ḥammeh is situated on the north bank of the Yarmûk River,¹ at the point where the frontiers of Palestine, Syria and Transjordan converge.² At el-Ḥammeh was located the Roman town of Ḥammat Gader, the Hot Springs of Gadara (Umm Qeis).³ Roman, Byzantine and early Arab sherds were found on all the slopes and the top surface of the mound, and a large number of Early Bronze sherds were found on its northeastern slope, most of them in a definitely restricted area.

Five pits were sunk down to the natural soil of the mound in what seemed to be the most promising places for trial excavations. In a large pit dug previously by someone down to the natural soil, less than half a metre below the surface on the western edge of the top of the mound, there were a number of Byzantine sherds. The first sounding 4 was made a few metres from the ancient synagogue, which had been exposed a few weeks before by E. L. Sukenik of the Hebrew University. Along the northern side of the pit there was exposed the inner face of a long wall. It was well built of large uncut boulders, which had probably been taken from the Yarmûk river-bed at the foot of the southern side of the mound. The wall extended downward .75 metre, and rested on a layer of gray earth mixed with ash, which seems to have been used as a fill. There was otherwise no trace of a general burning. A reused door-jamb was found beneath the surface of the ground, which was unrelated to anything else in area I.5 It was similar to a door-jamb in place at the southeast door of the synagogue. At right angles to this north wall and bonded into it, was a wellbuilt wall of large boulders, which extended across the pit, and rested on a foundation of three rows of smaller stones.7 This foundation jutted out slightly on the eastern side, and probably marked where the floor level had been. Next to the wall foundation was a pebble fill, indicating where space had been left when the original trench for the foundation of the wall had been dug to enable the laying of the foundation. The foundation stones rested on earth, and .125 metre lower down there was a plastered floor laid on small stones. Below this floor level a piece of a Byzantine marble altar-screen was found, as well as several small worn sherds. All the sherds in the pit were Byzantine or early mediaeval Arabic. Further excavation in the pit revealed a thick, undisturbed, natural layer of large and small pebbles, deposited in earliest times when swirling waters had receded and left them there. Examination of the hills on the other side of the Yarmûk revealed, at approximately

Fig. 1.

<sup>&</sup>lt;sup>2</sup> Bulletin of the American Schools of Oriental Research, 49, p. 22; QDAP, III, 4, pp. 173-4.

<sup>&</sup>lt;sup>3</sup> Annual of the American Schools of Oriental Research, VI, p. 42. <sup>4</sup> Fig. 1, section AB.

<sup>&</sup>lt;sup>5</sup> QD.1P, III, 4, p. 175. <sup>6</sup> Fig. 1, section AB. <sup>7</sup> Fig. 1, section AB.

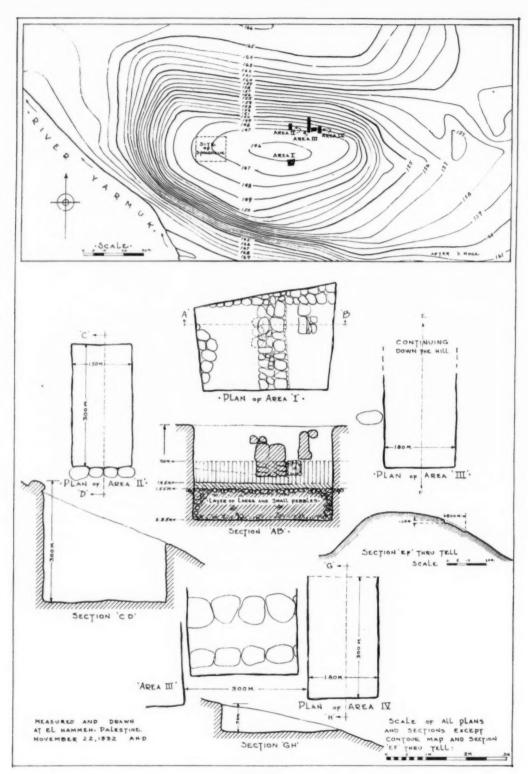


Fig. 1

the same height, the same layer of large and small pebbles. Area I was approximately half way between the synagogue and the eastern edge of the mound, and should have given evidence of occupation levels beneath those of the Byzantine period, had there been any. Tell el-Hammeh, as revealed by the various soundings, is for the most part an entirely natural mound, being an outspur of the hills on the western side of the river. It is isolated from them by a valley dug out by the rushing waters of the Yarmûk, whose volume is increased by the strong outflow of the hot springs at el-Hammeh. It is most probable that the smaller mound back of the theatre to the east is also a natural hillock, with a covering of Roman ruins <sup>1</sup> (fig. 2).

A second pit was dug on the northern side of the mound, approximately opposite



FIG. 2.—EL HAMMEH

the first, and about fifteen metres removed from it.<sup>2</sup> A quantity of Byzantine sherds was recovered, and at a depth of 2.40 metres, one late Iron III sherd was found. Otherwise the sounding revealed nothing except some loose stones which had become buried in the débris. There were no traces of walls or occupation levels.

A trench, about eight metres long, was then dug up the northeastern slope of the mound. At first only a few Byzantine sherds were discovered embedded but a slight distance beneath the surface in the natural chalky soil. Near the top of the mound, however, a large pocket of exceedingly interesting Early Bronze sherds was found at a depth of about 1.25 metres beneath the surface. There were no traces of walls. This sounding was immediately above the area on the northeastern slope of the mound, where a number of Early Bronze sherds had previously been picked up on the surface of the ground. Another trench, designated area IV,4 was dug on the northeastern top and slope of the mound, virgin soil being reached at a depth of .70 metre. It yielded Byzantine sherds. Between areas III and IV a rectangular pit was dug down to virgin soil between two rows of basalt stones, which, it was thought,

Annual, VI, p. 42,

Fig. 1, area III, section EF.

<sup>&</sup>lt;sup>2</sup> Fig. 1, area II, section CD.

Fig 1, section GH.

might have been the top stones of a wall, but proved to be only one course deep.<sup>1</sup> The pit yielded a few Early Bronze sherds, a small Roman bowl (fig. 3), and a



Fig. 3.—A Small Roman Bowl from Tell El-Hammeh

quantity of Byzantine sherds. The Roman pottery was undoubtedly brought up from the extensive Roman bathing establishment below the mound.

It is seen that at Tell el-Ḥammeh there are no traces of house or city-walls belonging to the Early Bronze Age, to which period almost all of the early sherds can be ascribed. The entire Early Bronze Age level had either been completely destroyed and dumped in the Yarmûk below the southern side of the mound, with some sherds thrown over

the northeastern side, or the entire settlement then may have been limited to a small guard post on the northeastern side of the mound. Clearances may have been undertaken in the Byzantine period. A police-post was probably established

and maintained in the Early Bronze Age for the protection of visitors to the hot springs, who perhaps came largely from Beth-Yerah on the Sea of Galilee about six miles away in a straight line.2 The only settlement which covers the top of the mound is a Byzantine one. There is also no trace of a Roman settlement on the mound, although there are very extensive Roman ruins adjacent to the hot springs in the valley below, belonging to Hammat Gader, by which name the Byzantine site was also known. It is possible that under the synagogue floor, traces of an Early Bronze Age level may be found; it is to be doubted, however, because soundings a few metres removed from it revealed only Byzantine remains.

Among the Early Bronze sherds recovered particularly from area III, a number of ledge handles was found. Two types were represented, the one



Fig. 4

being roughly rectangular in shape, extending from about four to six centimeters from the side of the vessel, and varying in length from 7.5 to 10 centimeters,<sup>3</sup>

Fig. 1, section between areas III and IV.

<sup>2</sup> Bulletin, 35, p. 12.

3 Fig. 4, 1. 2,

and the other type being a semi-elliptical projection of approximately the same measurements in its greatest dimensions as the rectangular type, and like it concave above and convex below.1 One of the rectangular shaped ledge-handles had been attached to the shoulder of a vessel, the rim of which was decorated with a row of oblique notches.2 The coarse gray clay of the vessel was filled with large grits. Its entire outer surface had evidently been covered with a coarse haematite slip, parts of which are still visible. The semi-elliptical ledge-handle seems to be the more common type. Those of this type found at Tell el-Hammeh,3 and one found at Beth-Yerah during one of the 1933 seminar trips of the Jerusalem School, reveal slight indentations on their outer edges made by finger impressions. One of these ledge-handles has an incision for the thumb on the lower convex side.<sup>5</sup> Neither at Tell el-Hammeh nor at Beth-Yerah were any wavy ledge-handles found. Albright reports from his finds at Beth-Yerah (Khirbet Kerak) that "ledge-handles were rare, and the typical long, narrow wavy ledge-handles of the Early Bronze in southern Palestine were hardly represented at all. The typical ledge-handle of Khirbet Kerak is short and smooth, but projects from four to six centimeters from the body of the vessel." 6 Only some degenerate forms of the wavy ledge-handle were found there by him.7 There seems to be a general absence of the wavy ledge-handle north of the Valley of Esdraelon. This fact, which had already been established through Albright's researches, is confirmed by the results of the soundings at Tell el-Hammeh and the surface finds at Beth-Yerah. The wavy ledge-handle is found frequently in Bronze Age sites south of Galilee in western Palestine, and south of the Haurân in eastern Palestine.8 The province of the wavy ledge-handle extends also through Moab and Edom. The writer hopes to publish his pottery collections from numerous Bronze Age sites in Moab and Edom in the near future in one of the forthcoming numbers of the Annual of the American Schools of Oriental Research. Wavy ledgehandles were found on almost every one of the Bronze Age sites located in these areas. This type of wavy ledge-handle, found also in Egypt, 10 seems to have fallen into disuse everywhere about 1800 B.C. Characteristic at Tell Beit Mirsim of the late Early Bronze J level, circa 23rd-21st centuries B.C., 11 wavy ledge-handles appear in degenerate forms in the I-H levels, circa 21st-19th centuries B.C., 12 and disappear before level G, circa 19th-18th centuries B.C.13

It is impossible to fix an exact date for the types of ledge-handles such as were found at el-Ḥammeh and Beth-Yeraḥ until stratigraphic excavations have been carried out at some site north of the Valley of Esdraelon. Whereas in central and southern Palestine the pushed up and folded ledge-handles can be traced down to about the end of the Early Bronze Age, the failure to find such types north of the

<sup>&</sup>lt;sup>1</sup> Fig. 4, 3. 4. 6; for examples of the semi-elliptical ledge-handle see Macalister, Gezer, III, pl. XXXII, 1; pl. CXLVI, 10; pl. CXLIX, 2; pl. CXLVIII, 11; II, p. 133, 2; Sellin and Watzinger, Jericho, pl. 20, A, 3b; Karge, Rephaim, p. 230 a, b; Beth-Pelet, II, pl. XXXVI; Bliss, A Mound of Many Cities, p. 40.

<sup>2</sup> Fig. 4, 1 = pl. XXXVII A, 1; for examples of the rectangular ledge-handle see Macalister, Gezer, I, p. 93; pl. XXII, 14; pl. CXLVIII, 3; pl. CXLVII, 24; pl. CXLIV, 15; Macdonald, Beth-Pelet, II, pl. XXXVI; Revue Biblique, July, 1934, p. 413, n. 2.

<sup>3</sup> Annual, VI, p. 28.

<sup>7</sup> Bulletin, 12, pp. 3-4.

<sup>8</sup> Annual, XII, p. 3; XIII, p. 58, n. 4.

Annual, VI, p. 28.
 Bulletin, 12, pp. 3-4.
 Bulletin, 51, pp. 12, 16; 55, pp. 3 ff.
 Annual, XII, p. 3; XIII.
 Annual, XIII, pp. 58-9.

<sup>&</sup>lt;sup>11</sup> Annual, XII, pl. 1, 7, 8; pl. 2, 16c; XIII, pp. 59-60, pl. 1, 3-5; 20, 20-4.

<sup>&</sup>lt;sup>12</sup> Annual, XII, pl. 3, 38-40; pl. 4, 35.

Valley of Esdraelon may simply indicate that the smooth ledge-handle of the el-Ḥammeh type was used to the exclusion of other types of ledge-handles down to the end of the Early Bronze Age. Numerous examples of the smooth ledge-handles found at Tell el-Ḥammeh and Beth-Yeraḥ have been found on various sites in Palestine in deposits which belong to the latter part of the Early Bronze Age.¹ The semi-elliptical smooth ledge-handles found at el-Ḥammeh and Beth-Yeraḥ may be compared to the small smooth ledge-handles found at Megiddo, which make their appearance there in stage V, predominate in stage IV, and extend down into stage III.² It is hardly possible, however, that these ledge-handles can be contemporaneous, because neither at Tell el-Ḥammeh nor at Beth-Yeraḥ was there found any of the gray

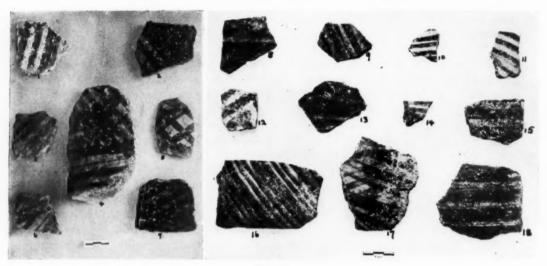


Fig. 5

burnished ware which at Megiddo extends from stage VII through stage IV, and to which Engberg and Shipton assign a fourth millennium date.<sup>3</sup>

Many of the sherds of the Early Bronze Age from el-Ḥammeh belonged to large, flat-bottomed 4 store jars, made for the most part of coarse "porridge ware," and decorated with a band-slip. The band-slip consists of parallel, vertical, diagonal, and latticed bands of brown, red, orange, or cream slip, sometimes put directly on the surface of the vessel, but more frequently superimposed on a slip of a single color. Fig. 5, 4=Pl. XXXVII A, 13 shows a sherd of a large, flat-bottomed pithos, covered on the outside with a cream slip over which latticed bands of dark brown paint were placed. The lower part of the jar was decorated with fairly evenly spaced parallel bands of dark brown paint over the underlying cream slip, which also covers the flat base.

1 See above, p. 325, notes 1 and 2.

<sup>4</sup> See Fig. 5, 4; Pl. XXXVII A, 13, 14; XXXVIII, 11-13; for similar types of bases from Beth-Yerah, see Fig. 6, 12-20.

<sup>&</sup>lt;sup>2</sup> Engberg and Shipton, Notes on the Chalcolithic and Early Bronze Age Pottery of Megiddo, chart, col. 14 c, d; Revue Biblique, July, 1934, p. 412.

<sup>2</sup> Engberg and Shipton, op. cit., p. 62.

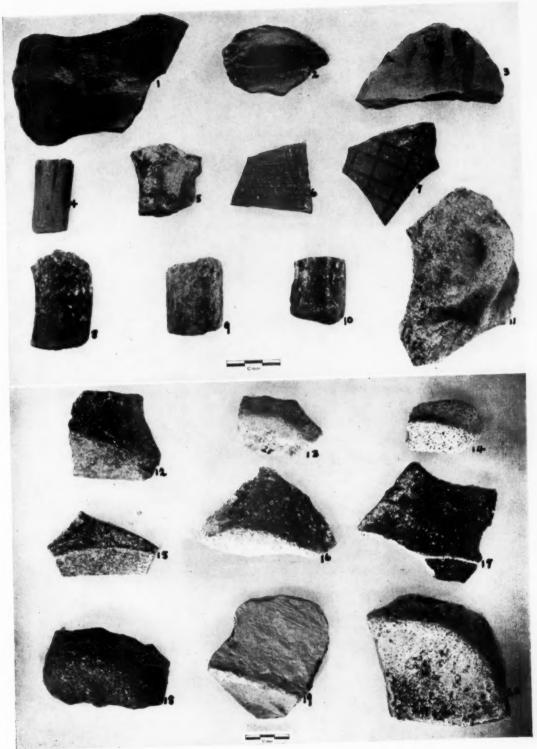


Fig. 6

Fig. 5, 1–3, 5–7 illustrates other sherds from Tell el-Ḥammeh with various types of the band slip. Large numbers of similarly decorated sherds are to be found at Beth-Yeraḥ;¹ specimens from Beth-Yeraḥ are illustrated on Fig. 5, 8–18. Similarly decorated sherds have been found, for instance, at Tell Beit Mirsim in the J level.² These decorated sherds with the band slip from el-Ḥammeh and Beth-Yeraḥ are strikingly similar to the painted sherds discovered at Megiddo. Most of the painted sherds at Megiddo were found in stages VII–III, with some occurring in stages II–I.³ The band slip on Fig. 5, 4, from el-Ḥammeh, is much like that on the "grain-washed" sherd with a loop handle decorated with several rows of oblique notches, found in stage V at Megiddo.⁴ It is interesting to note that at Beth-Yeraḥ fragments of two loop-handles similarly decorated with rows of slightly oblique notches were found. The handles were covered with a red wash, and evidently belonged to vessels deco-



Fig. 7

rated with the band-slip, Fig. 6, 8.9. Although the painted pottery of Tell el-Hammeh and Beth-Yerah cannot be contemporaneous with similar pottery found in stage V at Megiddo, because of the above mentioned lack of gray burnished ware, one can safely assume that it may be dated to the period extending from at least the middle to near the end of the third millennium B.C.<sup>5</sup>

A number of sherds were found at Tell el-Ḥammeh which were comb-faced with more or less parallel, hori-

zontal lines, Fig. 7, 7, 10=Pl. XXXVIII, 11; there was also one pattern combed sherd, Fig. 7, 8. Similar comb-faced sherds have been found in the J level at Tell Beit Mirsim 6 and at Beth-Yerah, Fig. 6, 6, where "comb-facing is generally carried out in horizontal parallel bands and patterned hatching." Fig. 7, 9 shows a sherd with oblique notches from Tell el-Ḥammeh, similar to several found in the J level at Tell Beit Mirsim.8

A number of collared rims of hole-mouth, ovoid-shaped, flat-bottomed jars were found at Tell el-Ḥammeh, decorated with a band-slip ornamentation, or with a plain haematite slip, Pl. XXXVIIA, 10.11; Pl. XXXVIII, 7–10. Some of these rims were scalloped, Pl. XXXVIIB, 5.6. There were numerous plain rims of hole-mouth

<sup>&</sup>lt;sup>1</sup> Annual, VI, p. 29. 
<sup>2</sup> Annual, XIII, p. 5, and pl. 1, 9. 17. 30; pl. 2, 3. 6. 7. 11. 16.

Engberg and Shipton, op. cit., p. 26, fig. 8.
 Annual, VI, p. 31; XIII, p. 59.
 Engberg and Shipton, p. 27, fig. 9.
 Annual, XII, p. 5; pl. 1, 5.14.15; pl. 2, 1.2.

Annual, VI, p. 28; Engberg and Shipton, p. 26, fig. 8, A–E.
 Annual, XII, p. 6; pl. 1, 26; pl. 2, 8; XIII, pl. 20, 17, 29; Beth-Pelet II, pl. XXXV.

jars, Pl. XXXVIIA, 2–4.6.8.9.¹ Belonging to large ovoid-shaped jars with slightly flaring mouths were various other rims, some of them with scalloped edges, and others plain, Pl. XXXVIIB, 4.7.² There were also a number of fragments of beautiful, large shallow platters and bowls with inverted rims. They were covered with rich haematite slip continuously burnished, Pl. XXXVIII, 15.16.14.19.³ Pl. XXXVIII, 16 has a continuously burnished haematite slip on both the inside and outside surfaces. At Beth-Yerah we found a sherd with a pattern-burnished design placed over the wet-smoothed, reddish buff, outer surface, Fig. 6, 7.⁴ At Tell el-Ḥammeh there was a fragment of a shallow bowl with inverted rim and pierced ear handle, covered inside and outside with a burnished haematite slip, Pl. XXXVIIB, 9=Fig. 8, 2.⁵ In addition, there were a number of sherds from Tell el-Ḥammeh belonging to medium-sized jars and bowls with out-flaring, plain, and slightly inverted rims, Pl. XXXVIII, 1–4. A short cylindrical spout, Fig. 8, 3, and a diminutive saucer, Fig. 8, 1=Pl. XXXVIIB, 8, found at Tell el-Ḥammeh probably also belong to the end of the third millennium B.C.⁶

One type of pottery not found at Tell el-Hammeh, which is probably an accident because it occurs frequently at Beth-Yerah, is that of vases or bowls with a wavy ribbing or fluting on the outside in imitation of metal work in silver. Such vessels have a highly burnished red slip inside, a black slip outside, and a red slip on the rim, or a highly polished black slip both on the inside and the outside. Fig. 6, 1 from Beth-Yerah has a continuously burnished grayish black slip on the inside and outside surfaces, with the ribbing consisting of a band of small knobs encircling the shoulder of the bowl. Fig. 6, 2 from Beth-Yerah is a fragment of a similar type of ornamentation, the knob being more pronounced. Fig. 6, 17 from Beth-Yerah belongs to a flat-bottomed bowl, completely covered on the inside and outside with a continuously burnished black slip. These vessels are made of a gray, well-levigated clay of slightly porous texture. Fig. 6, 19 has a wet-smoothed, light gray surface on the outside; Nos. 12, 13, 15, 16, 20 have traces of band slip or plain haematite slip decoration on the outside; there are no traces of ornamentation on Nos. 14, 18.

Two sherds with loop-handles were found at Tell el-Ḥammeh, belonging to jugs with slightly profiled rims, and ornamental grooves on the neck, Pl. XXXVIII, 5. There was also the fragment of another loop-handle with flat oval section, covered with a reddish-brown slip, on the top surface of which were several vertical and criss-cross lines of burnishing. It is similar to the loop-handle found at Beth-Yeraḥ, Fig. 6, 4. Other loop-handles from Beth-Yeraḥ covered with a red wash or slip are shown on Fig. 6, 5.8–11; Nos. 5, 10 like Nos. 8, 9 probably belonged to jars decorated with the band slip; No. 11 is from a jug whose entire outer surface was covered with a red-slip, further decorated with discontinuous vertical and diagonal lines of burnishing.

The Early Bronze Age settlement at Tell el-Hammeh flourished in the second and

<sup>&</sup>lt;sup>1</sup> Annual, XII, p. 5, pl. 1, 1-4, 18; Sellin and Watzinger, Jericho, pl. 20, A1.

<sup>&</sup>lt;sup>2</sup> Annual, XII, p. 5, pl. 1, 22; pl. 2, 16a. Annual, XIII, pl. 20, 35-40.

<sup>4</sup> Annual, XIII, pp. 61-2, pl. 20, 35, 38-40.

<sup>&</sup>lt;sup>5</sup> Macalister, Gezer, III, pl. CXLIX, 9, 18; II, fig. 328.

<sup>&</sup>lt;sup>6</sup> Annual, XII, pp. 6, 7, pl. 2, 14; XIII, pl. 1, 3; pl. 20, 26, pl. 3, 8. 
<sup>7</sup> Annual, VI, p. 28.

third quarters of the third millennium B.C. This dating is in general agreement with that established by Albright for Beth-Yeraḥ, the bulk of whose pottery he assigns to. Early Bronze II.¹ The pottery of Tell el-Ḥammeh furthermore confirms the opinion of Albright that the identification proposed between Tell el-Ḥammeh and the Egyptian Ḥammat of the thirteenth century B.C. is impossible.² This opinion is further substantiated by the striking similarity between the pottery of Tell el-Ḥammeh and Beth-Yeraḥ, which as we have seen, Albright had already noted.² The Early Bronze

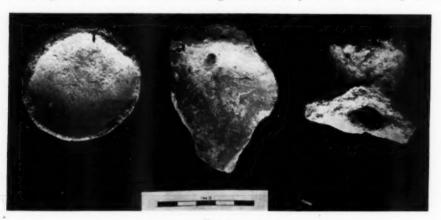


Fig. 8

Age pottery of Beth-Yeraḥ, which will be treated in full by Professor Albright in a forthcoming publication,<sup>4</sup> is, on the whole, richer in variety and finer in quality than that found at Tell el-Ḥammeh, as is to be expected. Beth-Yeraḥ was a large, flourishing metropolis, while Tell el-Ḥammeh was at best a small settlement.

NELSON GLUECK

HEBREW UNION COLLEGE Cincinnati, Ohio Nov. 5, 1934.

<sup>1</sup> Annual, XIII, p. 59; (see now Bulletin 57, pp. 29-30).

<sup>2</sup> Annual, VI, pp. 42-3; Bulletin, 35, p. 12; 19, p. 18; 49, p. 23.

<sup>&</sup>lt;sup>3</sup> Annual, VI, p. 28; XII, pp. 3, 4; Saarisalo, The Boundary Between Issachar and Naphtali, p. 80; QDAP, III, 4, p. 174; Jirku in Zeitschrift der Deutschen Morgenlaendischen Gesellschaft, 11: 3, 4, 1933, pp. 189–190, seems to be unaware of Albright's finds at Beth-Yerah, although they are documented particularly in Annual, VI, pp. 27–31. In addition to sherds from Bronze I, he claims to have found sherds from Iron I, which, however, he dates 900–600 B.c., p. 190. I have found neither Iron I nor Iron II sherds at Beth-Yerah, nor apparently have Albright or Saarisalo. Jirku's conclusion that an Israelitic settlement at Beth-Yerah has been proven is incorrect.

4 Annual, VI, pp. 27, 31.

# RAPPORT SOMMAIRE SUR UN PREMIER VOYAGE EN CARIE

#### PLANCHE XXXIX

J'ai effectué de la fin de septembre au début de novembre 1932 un voyage en Carie, aux frais de l'American Society for Archaeological Research in Asia Minor. Ce m'est un agréable devoir de remercier ceux qui m'ont aidé: avant tous, M. W. H. Buckler; c'est à son amicale estime que j'ai dû de recevoir de l'American Society les moyens matériels d'accomplir mon voyage et d'en publier les résultats dans les Monumenta Asiae Minoris Antiqua; je remercie aussi le Comité de l'American Society; puis M. A. Gabriel, Directeur de l'Institut français de Stamboul, qui m'a accueilli très aimablement dans son Institut, m'a présenté aux autorités turques et a obtenu pour moi les autorisations nécessaires à mon travail; je ne saurais dire combien son aide m'a été précieuse. J'ai rencontré la meilleure bonne volonté et la plus grande compréhension auprès des fonctionnaires turcs de l'Instruction publique. S. Exc. Aziz bey, Directeur du Musée de Stamboul, a bien voulu me munir d'efficaces lettres de recommandations pour les autorités des vilayets d'Aydin et de Muğla. Selahettin bey, Directeur du Musée d'Izmir, a facilité de toutes façons mes travaux et m'a lui aussi aidé dans mon voyage par son obligeante intervention; je leur en suis profondément reconnaissant. Pendant mon long séjour à Milas, j'ai toujours pu compter sur l'appui dévoué du Maarif memur Aarif bey, plein de zèle et de loyauté. Tout au long de mon voyage en Carie, comme au début de septembre en Mysie, j'ai eu un compagnon amicalement dévoué en la personne de M. L. Lecocq, élève diplômé de l'École des Langues Orientales, dont la connaissance de la langue turque m'a été très précieuse.

M'étant intéressé depuis longtemps à l'histoire et à l'épigraphie de la Carie et en connaissant, je crois, toutes les inscriptions, du moins celles qui ont été mises à la disposition du public, j'ai voulu contribuer à de nouvelles découvertes et essayer de prendre peu à peu une connaissance d'ensemble de la Carie, pays souvent parcouru par les archéologues, mais toujours de façon discursive, où les découvertes sont presque toujours restées isolées, ne s'insérant pas dans un ensemble (comme cela a été au contraire heureusement le cas pour la Lydie, grâce aux admirables efforts de Karl Buresch, de J. Keil et de A. von Premerstein) et sur la carte duquel il reste encore tant de blancs, pays inconnus.

Lorsque M. W. H. Buckler a bien voulu m'offrir l'appui de l'American Society pour des voyages en Asie Mineure, je n'ai pas hésité un instant à choisir la Carie pour mon domaine. Si j'en ai la force, le temps et les moyens, mon désir est de la parcourir peu à peu toute entière. Aussi, dans un premier voyage, je n'ai pas couru d'un bout à l'autre du pays, pour faire çà et là une rafle d'inscriptions inédites. Je me suis cantonné dans un rayon peu étendu, dont je n'ai pas d'ailleurs épuisé les richesses en un premier séjour, et j'ai cherché à comprendre ce bout de pays, à me le rendre familier, à en connaître tous les villages. C'est une méthode lente je la crois fructueuse. Mon voyage ne comporte pas de fouilles naturellement, ni de relevés topographiques ou architecturaux; Dieu sait pourtant combien de sites, par leur état de conservation remarquable, seraient dignes d'études archi-

tecturales, mais il y faudrait alors, non point un homme, mais une mission assez nombreuse et bien outillée, et du temps; mon rôle est de signaler ces endroits où il, serait utile de faire un travail approfondi, d'en faire une description plus détaillée peut-être que celles qu'on en a données, surtout de l'accompagner d'un choix abondant de photographies précises; plus tard, si l'on étudie en détail l'un ou l'autre des sites que j'aurai signalés, on ne lira plus qu'avec dédain ce que j'en aurai dit, et mon rôle aura été rempli. Je me suis donné une double tâche, d'épigraphie et de topographie historique. Dans ce premier séjour en Carie, j'ai pris pour objet d'étude la région de Milas, l'antique Mylasa, avec les territoires des



Fig. 1.-Le Théâtre de Stratonikeia

villes voisines. J'espère pouvoir, après un nouveau séjour dans la même région en 1934, donner dans les MAMA le résultat de mes recherches d'épigraphie et de géographie historique sur le territoire des villes antiques de Mylasa, Iasos, Pidasa, Olymos, Chalketor et Euromos, Kassosos, Hydisos et Keramos.

Les études que j'ai faites en dehors de cette région n'ont été qu'accessoires et ne servent qu'à amorcer des travaux futurs. En allant d'Izmir à Milas, et en revenant, j'ai passé quelques journées à Tralles (Aydin). L'examen du site de Tralles a un grand intérêt topologique; au point de vue épigraphique, je n'ai eu aucune satisfaction. Tralles avait toujours fourni d'assez nombreuses inscriptions, et j'espérais que la destruction de quartiers, lors de la guerre gréco-turque, aurait mis au jour de nouveaux documents. Cet espoir a été entièrement déçu et je n'ai point trouvé dans les ruines d'inscriptions nouvelles. J'ai seulement revu une partie des inscriptions agonistiques découvertes par Edhem bey et publiées B.C.H., 1904; elles sont,

sur le site de l'ancienne ville, dans le jardin de l'école des Arts et Métiers; je les ai photographiées ou estampées, avec trois autres inscriptions d'une autre série, mais déjà connues; deux fragments sont à rapprocher. Je publierai prochainement des inscriptions de Tralles que j'ai copiées ailleurs et, dans mes Études Anatoliennes, j'étudierai les fêtes de Tralles.

Dans la montagne désolée qui sépare la plaine d'Alabanda de celle de Stratonikeia, j'ai noté les mesures d'un petit édifice.<sup>1</sup>

A Stratonikeia (Eski hisar), je n'ai passé qu'une journée. Il vaudrait la peine qu'un architecte fit le relevé des édifices subsistants; il reste assez de traces de murs,

ici et là, dans les jardins, pour qu'on pût sans doute, sans fouilles, retrouver quelque chose du plan de la ville. Je donne cijoint des photographies: 1° du théâtre (fig. 1); 2° du mur extérieur de l'édifice appelé Serapeum; on pourra juger ainsi de l'appareil (fig. 2); 3° d'un fragment de l'inscription gravée à l'intérieur de cet édifice (Le Bas-Waddington, III, 519-520) (fig. 3). Au théâtre, dont la cavea a été récemment déblayée, se trouve un torse de Victoire ailée, et j'y ai copié trois inscriptions qui ont été publiées tout récemment dans la Rev. Arch. 1933, II, 54; comme la lecture et les restitutions sont fautives, je les publierai d'après mes copies. Par exemple, sur un bloc d'architrave, dans les débris de la scène, on a lu et restitué:

Μιννίων Λέοντος τοῦ Μιννίωνος καὶ οἰ νίοὶ [αὐ]τοῦ κόσμον Διονίσωι καὶ Στρατονικέων [δήμωι].

Fig. 2.—Mur extérieur d'un édifice de Stratonikeia

Le mot κόσμον sans article, et la fréquence des dédicaces de:—καὶ τὸν ἐπ' αὐτοῦ ου σὺν

αὐτῶι κόσμον, montrent que le texte était bien plus long à droite. Aussi, grâce à la complaisance des autorités et des habitants, ai-je fait donner quelques coups de pioche qui ont dégagé la suite du texte:

Μιννίων Λέοντος τοῦ Μιννίωνος καὶ οἱ υἰοὶ ἀνέθηκαν κίονα καὶ τὸν ἐπ' αὐτοῦ κόσμον Διονίσωι καὶ Στρατονικέων τῶι δήμωι.

Stratonikeia abonde en fragments architectoniques et sculpturaux. Ce sont surtout des débris d'ordre corinthien. A cet égard, le contraste est frappant avec Mylasa, où les morceaux d'architecture ionique dominent largement. Ainsi, rien qu'en parcourant les rues de Milas et d'Eski hisar, on peut se douter de ce que confirment les inscriptions: la floraison de Mylasa ne se prolonge guère après l'époque hellénistique; les textes et les monuments de l'époque impériale y sont rares; c'est

1 Cf. Briot, B.C.H. 1894, 546.

alors que se développe, à son détriment, Stratonikeia, très prospère à l'époque impériale, et où les constructions d'époque romaine ont dû recouvrir la ville hellénistique. J'ai profité de mon court passage pour copier quelques inscriptions inédites, notamment deux inscriptions chrétiennes assez étendues, (on n'y connaissait jusqu'ici que quatre inscriptions chrétiennes très courtes: H. Grégoire, Recueil des inscr. qr. chr. d'Asie Mineure, 243), l'inscription d'une sépulture de gladiateurs;

Fig. 3.—Fragment de l'inscription de Stratonikeia, L.W., III, 520

surtout, dans le mur extérieur d'une maison, un fragment d'une inscription appartenant à la même série que Le Bas-Waddington, III, 527 brillamment expliqué par Ad. Wilhelm, Beiträge zur gr. Inschriften., 183–187; l'épisème est un Héraklès.

Au contraire, à Mylasa et dans la région environnante, j'ai procédé à une étude méthodique. Les restes sont à une faible profondeur, souvent à 1m.50 ou 2m., et bien des maisons contiennent des inscriptions. J'ai revu beaucoup d'inscriptions déjà publiées, et i'en ai pris soit un estampage. soit une photographie, soit les deux; besogne souvent utile, parfois ingrate, toujours longue; on peut passer plusieurs heures dans un village pour estamper seulement des inscriptions arméniennes; par contre, les résultats sont parfois intéres-

sants. On n'avait aucune indication sur la gravure d'un fragment d'édit royal, mentionnant un certain Alexandros, δ νίδς 'Αλέξανδρος, publié par Hula et Szanto (Sitzungsberichte Ak. Wien, 132, 1895, p. 15), on savait seulement que les lettres étaient hellénistiques, ce qui gênait fort l'interprétation du texte (cf. Ernst Meyer, Die Grenzen der hell. Staaten in Kleinasien, 128–129); j'en ai pu prendre un estampage. J'ai pris aussi une copie complète du décret B.C.H., 1922, 399, n.4; S.E.G., II, 539; il a été rendu en l'honneur de Ποσειδώνιος Πολυχάρου Βυζάντιος. Je signale, parmi les inscriptions inédites de Mylasa: d'assez longs fragments de baux, avec noms de lieux et noms de divinités, des dédicaces au gymnase, des inscriptions du type Νείκη Παμφίλου. Εὖ, une base avec la formule apotropaïque ὁ τοῦ Διὸς παῖς καλλίνεικος Ἡρακλῆς ἐνθάδε κατοικεῖ· μηθὲν εἰσίτω κακόν; un fragment d'une fondation pour un culte funéraire, un inventaire de vases sacrés.

Une nouvelle divinité de Mylasa est le dieu Σωνομ. Dans le décret S.E.G., II, 539, on avait lu ἰερέως Σωνομ, mais, la copie de ce décret étant très fautive par ailleurs, on s'était demandé s'il ne faudrait pas lire ἰερέως Ἑρμοῦ. J'ai revu la pierre qui donne, sans aucun doute: Σωνομ. Un bail inédit mentionne aussi un prêtre de Σωνομ. Enfin, une troisième inscription nomme aussi un prêtre de Σωνομ. Cette dernière inscription est précieuse aussi par la mention du héros Euthydemos et du héros Hybreas, les deux rhéteurs bien connus qui ont gouverné Mylasa au milieu du I<sup>er</sup> siècle avant notre ère.

Enfin, je pense avoir éclairci deux problèmes: d'abord celui des relations de Mylasa avec Olymos et Labraunda, puis celui de l'organisation politique de Mylasa. Nous savons que le peuple de Mylasa était réparti en trois tribus (αὶ τρεῖς φυλαί): l'une, celle des 'Οτωρκονδεῖς, est connue depuis Le Bas et par de nombreux décrets; la seconde, celle des 'Υαρβεσυταί, par un décret (W. Judeich, Ath. Mitt. 1890, p. 170; Michel, Recueil, 725; Schaefer rétablit son nom dans Le Bas-Waddington, III, 405); un décret que j'ai copié donne le nom de la troisième, la tribu des Κονοδωρκονδεῖς. Je ne pensais publier aucune inscription dans ce très succinct rapport préliminaire, les réservant pour le volume des MAMA; mais cette inscription vient d'être publiée par A. Laumonier dans la Rev. Arch. 1933, II, p. 38; or cette publication est si défectueuse que, voulant éviter que des épigraphistes perdent leur temps à essayer de corriger cette copie fautive, je donne ici, sans plus attendre, ma copie et mes restitutions.

- 2 μεγαλομερώς καὶ εὐ
  [κ]αὶ εὐεντ[εὐκ]τως ὅπως οὖν κα[ὶ ἡ φυλὴ τοὺς ἀ]γαθοὺς τῶν ἀνδρῶν [κ]αὶ ἀξίου[ς ἐπισημα]-
- 5 [σ]ίας καὶ τιμ[ή]ς ἀποδεχο[μ]ένη κα[ὶ τιμῶσα]
  φαίνητα[ι] ἔνεκεν τοῦ π[ο]λλοὺς [τὸν πρὸς ἀ][ρ]ετὴ[ν] ζηλοῦν βίον ἀγαθῆι τύ[χηι ἐπηνῆσθαι]
  [Δ]ιονύσιον καὶ στεφανῶσα[ι αὐτ]ὸν χρυσ[ῶι στε]φάνωι στῆσαι δὲ αὐτοῦ [εἰκόνα χ]αλ[κὴν ἐ]-
- 10 πὶ βήματος λευκοῦ λίθου [ἐν] ῷ ἃν αὐτὸς [βού]-[λ]ηται τόπῳ· διδόσσθ[αι] δὲ [αὐ]τῷ ἔως [ζωῆς] [κ]αὶ μερίδα ἐκ τῶν θυσιῶν πασῶν τῶν ὑπὸ [τ]ῆς φυλῆς συντελουμέν[ων· ἐπιγρ]αφὴν [δὲ] [γ]ενέσθαι ἐπὶ τοῦ βήματο[ς τήνδε·]· ἡ φυλὴ
- 15 ἡ Κονοδωρκονδέων Διο[νίσιο]ν 'Ιατροκ[λεί][ο]υς τοῦ Διονυσίου — —
  [τ]ῶν νέων ἐτίμησεν χρυσ[ῶι στεφάνωι]
  [εἰκόνι χ]αλκῆ καὶ με[ρί]δι ἔως ζ[ῳῆς ἐκ]
  [τῶν θυσί]ων τῶν ὑπ' αὐτῆς συ[ντελουμένων πα]-
- 20 [σῶν ἀρετ]ῆς ἔνεκεν καὶ καλοκ[άγαθίας τῆς] [εἰς τὴν φυλὴν καὶ εἰς τὴν] πα[τρίδα —]

Notes critiques.—Je ne signale que les principales différences avec la copie de A. Lau(monier).—L. 1.  $\epsilon \dot{v} [\sigma \epsilon \beta \tilde{\omega} s]$ , Lau.—L. 3–4: ΛΙΕΤΕΝΤ...ΤΩΣ ὅπως οὖν κα[ὶ ἡ φυλὴ τοῖς ἀ]|γαθοῖς τῶ[ν ἀ]ν[δ]ρῶν [κα]ὶ ἀεὶ ου — —, Lau.. Εὐεντεύκτως est un mot rare, typiquement hellénistique; il est connu par Pollux, 5, 139: τὸ γὰρ εὐπροσόδως σκληρόν, ώσαὐτως δὲ καὶ τὸ εὐεντεύκτως, ἀμείνω δὲ τὸ εὐεπιμίκτως,

εὐξυμβόλως, εὐμενώς, φιλανθρώπως, πράως, ἡμέρως. Εὐεντευκτός, "d'un abord facile, aimable" est cité par Pollux, 5, 138 (comme δυσεντευκτός) et se trouve dans Philon (voir Liddell-Scott, s.v. et surtout le Thesaurus); il faut y ajouter des textes épigraphiques: décret de Kos sous le règne d'Auguste, I. von Olympia, 53, 28; [τὴν ἐα]τοῦ φιλανθρωπίαν εὐεντεικτὸν κατασκευάζων; le mot a été restitué par Ad. Wilhelm, Arch. epigr. Mitt. Oester., 1897, 65 dans le décret de Mylasa, Le Bas-Waddington, III, 410, 7: [εὐ] εντευκτὸν ἐαυτὸν πᾶσιν; il a rapproché εὐαπάντητος dans un décret d'Apollonia de Thrace (Dumont-Homolle, Mélanges, p. 459, 111 d²): εὐαπάντητος δημοσία τε καὶ ἰδία; pour εὐαπάντητος et εὐαπαντησία, cf. aussi le décret d'Aigine OGI, 329, 26 et les passages des Septante (avec εὐαπάντητος φιλανθρωπία à rapprocher du décret de Kos) et de Chrysippe, cités dans Liddell-Scott.

L. 5: ίας καὶ τιμ[ὰς] ἀπο[δ]εχομένη κα —, Lau, Pour ἐπισημασία, cf., outre le document de Mylasa Le Bas-Waddington, III, 429, que je cite ci-après; S.G.D.I., 3720, 12 (Kos); Polemon, I, 30, 1, 22 (corrigé par P. Roussel, R.E.G., 1930, 200) (Demetrias); B.C.H., 1920, 70, l. 6-8 (Stratonikeia); pour έπισημαίνεσθαι, "laudare", cf. S.G.D.I., 3720, 7-8: ὅπως οὖν καὶ τοὶ φυλέται φαίνωνται ἐπισαμ[αιν]ό-[μ]ενοί τε καὶ τιμῶντες τὸς ἀγαθος τῶν ἀνδρῶν (Kos); Archiv Papyrusforsch., VI, 70, 1. 34; τοὺς ἀξίους ἄνδρας καὶ πολύ διαφέροντας ἐν πᾶσιν ἐπισημαινόμενοι (soldats crétois), et les passages des inscriptions (O.G.I., 51, 12-13) et de Polybe signalés là, p. 22, par M. Holleaux; pour ἀνεπισήμαντος, ἀπαρασή-

μαντος, cf. Ad. Wilhelm, Neue Beiträge, IV, 59-60.

L. 6-7: ΑΙΝΗΤΑΣ ένεκεν τοῦ πολλούς — Τ. ΤΗ. ζηλοῦν βίον, Lau. Cf. Le Bas-Waddington, ΙΙΙ, 429; Ι.G., ΧΙΙ, 9, 236, 5-6: τὸν ἐπ' ἀρετῆι καὶ δόξηι βίον ἐζηλωκώς ἀπὸ τῆς πρώτης ἡλικίας (Erétrie); I.G., V2, 517, 21: ἐπὶ τὸν κατ' ἀρετήν βίον (Achaiens); cf. aussi, à Kyzique, A.M., 1906, 431, 4-5: ἵνα — ὁ δῆμος — πολλοὺς [προτ]ρέπηται πρὸς τ(ὸ τ)ὸν ὅμοιον ζῆλον τῆς ἀρετῆς συνεκτροχάζειν. Les lignes 5-7 se restituent d'après Le Bas-Waddington, III, 429, 8 sqq., qui doit être un décret de la même tribu pour un gymnasiarque:

> 8 — - άξίους ἐπισημασίας καὶ -— πρὸς ἀρετὴν ζηλοῦν εἴ[θισται — 10 - χρυσζωι στεφάνωι, στησαι δ' έν ὁποίω αν -

— τος βούληται τόπωι καὶ δώσο υσιν (copie: ΔΟΣΟ)

— κατὰ τὰ δ]ηλούμεν α -

D'après le nouveau décret des Konodorkondeis, je restitue, avec des lignes de 65 à 75 lettres:

άξίους ἐπισημασίας καὶ [τιμῆς ἀποδεχομένη καὶ τιμῶσα φαίνηται ἔνεκεν τοῦ πολλούς τὸν] πρός άρετην ζηλοῦν βί[ον' άγαθηι τύχηι' ἐπαινέσαι μέν — καὶ στεφανώσαι αὐτόν χρυ] σωι στεφάνωι στήσαι δ[ε αὐτοῦ εἰκόνα χαλκήν έπὶ βήματος λευκοῦ λίθου εν ὧι ἃν αὐ] τὸς βούληται τόπωι' <κ> δίδοσθ[αι δὲ αὐτῶι ἔως ζωῆς καὶ μερίδα ἐκ τῶν θυσίων τῶν ὑπὸ τῆς] [φυλής συντ]ελουμέν[ων πασών --]

L. 9:  $\epsilon i [\kappa \delta \nu \alpha \chi] \alpha \lambda \kappa [\tilde{\eta}]$ , Lau.—L. 11:  $\tilde{\epsilon}[\omega] s [\tilde{\varsigma} \tilde{\eta} \kappa] [\alpha i$ , Lau.—L. 11-13: sur les documents de Mylasa relatifs à l'attribution des parts des victimes, cf. L. Robert, Rev. Phil., 1927, 123-124.

L. 15. Lau. a copié aussi Κονοδωρκονδέων, mais voulait y voir une graphie fautive pour (τω)ν 'Ο(τ)ωρκονδέων. Le seconde hypothèse: "est-ce une autre tribu de Mylasa"? n'est pas de son invention.

L. 16: [γυμνασιαρχήσαντα?], Lau.—L. 18: καὶ μέχρι ἔως ζ[ĝ μερίδι ἐκ τῶν θυ σιῶν πασ]ῶν, Lau.

Ma lecture μερίδι, et non μέχρι, a été vérifiée sur l'estampage.

L. 20-21: καλοκ[αγαθίας της είς τε | την φυλήν και είς τους] παι [δας? και τους νέους], Lau. Α l'appui de ma restitution, cf. le décret d'une tribu de Mylasa, Le Bas-Waddington, III, 407 (Michel, Recueil, 475), l. 17: ἀρετής καὶ καλοκάγαθίας ἔνεκα τής είς τε τήν φυλήν καὶ είς τήν πατρίδα.

On a supposé à Mylasa un système compliqué de subdivisions des tribus, avec des "dèmes," divisés en συγγένειαι, puis en πάτραι (voir P. Francotte, La Polis grecque, 207 sqq.). Avant de partir pour Mylasa, j'avais vu que les dèmes n'avaient jamais existé et que les pseudo-"démotiques" de Mylasa devaient correspondre aux συγγένειαι; en effet on range parmi les "démotiques" 'Αγανίτης et nous avons des fragments de décrets de la συγγένεια des 'Αγανιτεῖs. La révision d'une inscription m'a fourni une preuve supplémentaire; j'ai débarrassé du plâtre qui le cachait en

partie le fragment de loi sacrée d'une συγγένεια. B.C.H, 1922, p. 407, n. 11; S.E.G., II, 546; et j'ai constaté que cette συγγένεια était celle des Μαυννίται; or Μαυννίτης est un des "démotiques" les plus fréquents à Mylasa.

Aux environs de Milas, j'ai trouvé, acheté et donné au Musée de Smyrne, un curieux bas-relief, représentant un ὡτογλύφιον, je pense, entre deux oreilles, avec la dédicace à Demeter d'un καθηγητής εὐρών. A Olymos, j'ai trouvé des fragments de baux. A Chalketor, j'ai revu des inscriptions. A Euromos et au village voisin de Mendelia, j'ai revu quelques documents, copié un court texte (8 lignes) relatif à une distribution au σύστημα τῶν πρεσβυτέρων sur les fonds donnés par un gymnasiarque. Ci-joint,

une vue du grand temple d'Euromos (fig. 4). Au sommet d'un pilier de l'agora d'Euromos, j'ai copié en partie un décret de 58 lignes, pour un citoyen Καλλισθένης Πολυχάρου, qui avait rendu des services financiers à la ville dans des moments difficiles; abîmé par l'humidité, il est très difficile à lire; il est fait allusion à une alliance avec Iasos. Pour Kéramos, voir l'article suivant.

Au point de vue topographique, j'ai pu voir combien étaient maigres les observations faites jusqu'ici sur la topographie de la ville et de sa campagne. J'ai constaté que les pierres n'avaient en somme pas beaucoup voyagé dans la ville. Très souvent, les inscriptions conservées ou encastrées dans une maison ont été trouvées dans son sous-sol même. C'est dans un même quartier que je trouvais les inscriptions d'époque romaine, dans un autre les inscriptions du gymnase, dans un autre celles relatives à Zeus Osogô. Aux environs de la ville, j'ai photo-



FIG. 4.—LE GRAND TEMPLE D'EUROMOS

graphié la façade dorique d'une tombe rupestre et levé le plan de la chambre (fig. 5). A l'Ouest de la ville, près du Mausolée, on peut suivre les remparts d'une forteresse. Je pense avoir identifié la Leuke Komé et Omboi, nommés dans les baux. A Kuyruklu hisar, les remparts d'époque récente reposent sur des assises helléniques en très bel appareil, qui forment une enceinte très étendue; à l'intérieur, de nombreuses substructions helléniques; il faut supposer là une ville, avant l'époque hellénistique. Ci-joint une photographie (fig. 6) de la porte de Kuyruklu hisar.

A Olymos, le site du sanctuaire d'Apollon et d'Artémis se laisse aisément fixer; la terre cache sans doute encore bien des marbres inscrits. Quant à la ville, je n'ai pas su la trouver dans les environs immédiats; peut-être était-elle dans la montagne, ou n'a-t-elle pas eu de fortifications ayant laissé des traces.

J'ai étudié topographiquement la sympolitie de Milet et de Pidasa (Milet,







Fig. 5.—Tombe rupestre près de Mylasa

FIG. 6.—KUYRUKLU HISAR: LA PORTE

Delphinion, 149); j'ai visité soigneusement la région de Bafi. J'ai acquis la certitude que les conclusions topographiques de l'éditeur de ce document étaient entièrement fausses, et je pense avoir fixé le site de Pidasa; j'en parlerai en détail après mon prochain voyage, ainsi que de Ioniapolis.

Dans les arches du pont turc qui traverse le Sarı çayi, sur la route de Mylasa à Euromos, j'ai copié une série de documents, fort abîmés par l'eau qui les recouvre à l'époque des pluies. La plupart ont été apportés d'Olymos qui n'est pas éloigné. Mais un bloc se distingue nettement de tous les marbres blancs ou bleus que j'ai vus à Mylasa et à Olymos, un bloc de marbre blanc traversé d'une veine noire: il porte deux décrets relatifs aux domaines d'Apollon et d'Artémis προγονικοί θεοί; les ταμίαι cités appartiennent aux συγγένειαι des Τετραφυλείς, des Κορμοσκωνείς, des Μασσωνείς; le δήμος qui a rendu ce décret ([ἔδοξ]εν τῶι δήμωι) fait donc partie de Mylasa, au même titre que le  $\delta \tilde{\eta} \mu \sigma s$  d'Olymos qui rend aussi des décrets après qu'il s'est uni en sympolitie avec Mylasa; mais il est impossible de lire aussi bien Μυλασέων que 'Ολυμέων. Certes les lettres sont très rongées; mais j'ai revu maintes fois ces lignes par des éclairages différents; c'est bien souvent que je suis passé sur ce pont du Sarı çayi, souvent je me suis arrêté et je suis descendu vérifier ma lecture; je lis: [ἔδοξ]εν τῶι δήμωι [τ]ῶι Ὑδαέων. Voici donc, je pense, une ville des Ὑδαεῖs qui, comme celle des 'Ολυμείs, a été absorbée dans celle de Mylasa par une sympolitie. Je suppose qu'elle devait être située dans la vallée qui est à l'Ouest du Sodra dag et que j'étudierai à mon prochain voyage. Ces 'Τδαεῖs ne sont pas, je crois, des inconnus; les listes des tributs attiques nous font connaître des Τδαιῆs, qui paient un faible tribut; deux fois, ils sont nommés à côté des Χαλκετορεῖς, deux fois à côté des Τδισσείs. On les place dubitativement dans la Pérée rhodienne, dans la région d'Erine, en rapprochant une ville d'Hydas ou Hylas, qui serait située dans cette région, d'après Pline et Mela, les seuls auteurs qui nous la fassent connaître. Je pense que les Tδαείs du pont du Sari çayi et les Tδαιῆς de la Confédération maritime

athénienne sont un seul peuple; ils étaient, selon ma localisation, voisins de Chalketor.

A cinq heures au sud de Mylasa, à l'extrémité sud de la plaine qui abritait aussi le peuple des Kassoseis, se trouve, près du village de Karaca hisar, une ville que l'on appelle Pidasa ou Pedaso ou Pedasos ou Pedason. Elle a été visitée par H. Kiepert, Cousin, V. Bérard, Fabricius, Hula et Szanto et, en dernier lieu, par Paton; depuis

Paton, en 1895, je crois qu'aucun archéologue n'y est passé, les gens de Karaca hisar en ont gardé le souvenir, puisqu'en me guidant aux ruines, ils m'ont rappelé qu'il y était venu, il y a 40 ans, un Anglais qui cherchait les vieilles pierres. On n'a jamais dit que quelques mots sur cette ruine si intéressante et pittoresque, couverte de pins. Elle occupe le sommet d'une chaîne abrupte, à deux cimes; on peut suivre les remparts, en partie très bien conservés et qui datent, je pense, du IIIº siècle: l'une des cimes a servi d'acropole; dans l'espace plat qui s'étend entre les deux cimes, comme un isthme, Hula et Szanto avaient reconnu la place du théâtre, et j'ai vu à côté, bien nettement, l'agora avec ses portiques. On domine un vaste paysage: au Nord, la plaine, dont la ville tirait sa nourriture; au Sud, l'âpre montagne boisée du Kara dağ; à l'Ouest, la vue s'étend, par une vallée, vers le golfe de Bargylia. La photo-



Fig. 7.—Hydisos: UNE TOUR

graphie que je donne sur la planche XXXIX, montre l'acropole vue de l'autre cime; on voit quelle est la force de la position; entre les cimes, les murs et les tours; l'agora était à droite. La figure 7 montre l'appareil d'une tour. Certains bâtiments avec une inscription dédicatoire à un empereur, montrent que la ville a subsisté à l'époque romaine. Quel était son nom? Là-dessus, point d'hésitation: c'est Pidasa, dit-on unanimement (je donnerai la bibliographie dans mon étude détaillée de la question, dans les MAMA); mais c'est unanimité dans l'erreur. Avant d'aller en Carie, j'avais vu que Pidasa ne pouvait être située à Karaca hisar. Si l'on avait en effet proposé de placer Pidasa à Karaca hisar, bien que nul document de Karaca hisar ne nommât la ville, c'est que ce site semblait assez bien concilier les indications passablement contradictoires des textes, qui invitaient à chercher Pidasa tantôt dans la région de Mylasa, tantôt dans celle d'Halikarnasse; on la plaçait donc à mi-chemin. Mais Paton a bien vu (et il a été généralement suivi, sinon unanimement) qu'il y avait deux Pedasa ou Pidasa, et que l'une était proche d'Halikarnasse; il l'a localisée avec bien de la vraisemblance à l'importante ruine carienne de Gök çallar. Lui-même a continué à placer l'autre Pidasa à Karaca hisar.

Mais la découverte du traité de sympolitie entre Milet et Pidasa a montré—ou aurait dû montrer—que le territoire de Pidasa était limitrophe de celui de Milet: on a continué à placer Pidasa à Karaca hisar, comme si l'identification était assurée: l'explication de l'éditeur du traité entre Milet et Pidasa, qui admet, sans en rendre un compte exact, que le territoire de Milet et celui de Pidasa étaient séparés l'un de l'autre par ceux d'Iasos et de Mylasa, est une monstruosité topographique. Pidasa, la Pidasa septentrionale, était située dans le Grion, à un endroit que j'espère avoir déterminé: il est impossible qu'elle ait été à Karaca hisar. Je me demandais donc quelle ville carienne, assez importante, de site encore incertain, ayant vécu jusqu'à l'époque impériale, et n'ayant point disparu plus tôt comme tant de villes cariennes de la Confédération maritime athénienne, avait pu être la ville de Karaca hisar. Et je m'étais persuadé, mais sans en pouvoir fournir de preuves rigoureuses, que cette ville était Hydisos. Hydisos, sous la forme Hydissa, est citée par Ptolémée entre Mylasa et Idyma: elle existait encore à l'époque impériale. On a cherché le site à travers toute la Carie. Trompés par une indication de Pline, qui cite les Hydissenses parmi les villes de l'intérieur, on veut placer le plus généralement Hydisos soit dans la plaine d'Alabanda, à Eski çina, soit, plus loin encore, dans les montagnes entre le Marsvas et l'Harpasos, au site voisin de Mesevlieh, là où d'autres cherchent, avec pleine de raison, Hyllarima. Quelques érudits ont fait remarquer que pourtant Hydisos, avant fait partie de la Confédération maritime athénienne, ne pouvait être située à 80 ou 100 Km à vol d'oiseau dans l'intérieur; c'est l'évidence même. Je suis allé à Karaca hisar dans l'espoir d'y trouver quelque document qui me donnât le nom de la ville; or, au delà de toute attente, ma localisation d'Hydisos à Karaca hisar a été confirmée par deux découvertes. D'abord, j'ai vu, sur les ruines mêmes, entre les mains d'un berger, trois monnaies de bronze: l'une était de Priène, les deux autres d'Hydisos (je donnerai un corpusculum des monnaies d'Hydisos) sos),1 ce qui est un genre de preuve suffisant à lui seul, bien qu'il ne soit pas toujours estimé à sa juste valeur. En second lieu, j'ai trouvé trois inscriptions dans les ruines: l'une, déjà connue, est une dédicace d'un édifice de l'époque impériale; la seconde, sur l'acropole, mentionne un polémarque; de la troisième, gravée sur une base dans le portique Ouest de l'agora, on lit à la première ligne Λὐτοκράτο[ρα], et aux lignes 5 et 7:

> 'Η βουλή καὶ ὁ δημος ὁ 'Υδισέω[ν]

Ceci est d'accord et avec Ptolémée et avec les listes des tributs attiques; de l'acropole, l'on voit ou l'on devine la mer, à l'Ouest, vers Bargylia. Ce fut la plus grande satisfaction de mon voyage que la localisation, certaine, de la ville d'Hydisos à Karaca hisar.

Paris, janvier 1934.

Louis Robert

<sup>&</sup>lt;sup>1</sup> La monnaie Inv. Coll. Waddington, 3587, attribuée à Tralles, est un bronze d'Hydisos.

# TÊTE ARCHAÏQUE TROUVÉE A KERAMOS

## PLANCHES XL-XLI

## I.—LE LIEU DE LA TROUVAILLE

Ex octobre 1932, j'ai photographié à Keramos une tête archaïque, provenant de fouilles faites par les paysans et déposée au bâtiment municipal, à l'ukumet. On en trouvera plus loin diverses photographies que j'ai faites. J'insiste sur l'imperfection de mes photographies, parce qu'elle rend plus vive ma reconnaissance envers mon ami P. Devambez, qui a bien voulu se charger, malgré la documentation insuffisante que je pouvais lui fournir (notamment pour les mesures; je n'ai mesuré que la hauteur et la largeur), de présenter au public ce monument inédit. Je pense que les lecteurs le remercieront avec moi d'avoir accepté de commenter cette sculpture d'après les photographies.

Keramos est situé sur la côte Nord du golfe dit, dans l'antiquité, golfe de Keramos. C'est la seule ville notable située entre Idyma, au fond oriental du golfe, et Halikarnasse, à l'Ouest. C'est que la montagne tombe sur la côte en falaise abrupte. Le petit village aux maisons blanches à terrasses qui est dispersé dans les importantes ruines de Keramos porte proprement le nom de Oren (la ruine); ce qu'on appelle Gereme, où se conserve le nom de Keramos, c'est le district, avec les villages voisins d'Ören, y compris Pirnari. Keramos est à une dizaine d'heures de Mylasa, mais l'accès n'en est point si facile, et les relations les plus actives de Keramos ont dû avoir lieu par mer. Le site est très caractéristique et les photographies que je donne ici, en attendant la description détaillée des MAMA, peuvent en donner une idée. (Pl. XL, A, B.) La falaise est couverte de maquis ou de pins; dans le roc sont creusées des tombes, où l'on installe maintenant des ruches. Cette falaise est une barrière contre les vents du Nord, et la chaleur est étouffante à Keramos. La plaine qui s'étale au pied de la falaise, la seule de toute la côte, est fertile; l'eau n'y manque pas; on voit, sur la carte de Philippson, entre le point où il note des maisons ("Haüser"; on appelle le lieu Islamevler) et Keramos, des marécages; l'eau y sourd en effet en abondance au plus fort de l'été et les chevaux doivent souvent passer dans l'eau au milieu des roseaux. On y cultive le tabac, et surtout l'orge, que l'on vend dans les îles, surtout à Kalymnos. Les ruines anciennes s'étendent sur un vaste espace: dans la plaine, outre de nombreux sarcophages, plusieurs grands bâtiments, en partie très bien conservés, de l'époque romaine et de l'époque byzantine,—sur l'acropole, colline située au bas de la falaise, avec une enceinte hellénique. Dans les deux parties des ruines, j'ai revu des inscriptions et j'en ai copié de nouvelles.2

<sup>2</sup> L'une est dédiée θεοῖς Μεγάλοις Κεραμιήταις. Pour l'épigraphie de Keramos, voir Hicks, J.H.S., 1890, 113 sqq.; Maiuri, Annuario, loc. cit., 473–475, n. 19–21 (S.E.G., IV, 480–482). Je donnerai une bibliographie complète dans MAMA. Keramos n'apparaît point dans le Recueil des Inscr. gr. chrêt. d'Asie

<sup>&</sup>lt;sup>1</sup> Sur le site, voir provisoirement Smith, dans Newton, *Halikarnassus*, II, 627; Guidi, *Annuario Sc. At.*, IV-V, 386-396. Pour l'histoire de Keramos, Hicks, *J.H.S.*, 1890, 109-113 (mais le commentaire du n. 1, Michel *Recueil*, 458, est un roman). De l'article *Keramos*, par L. Bürchner, dans Pauly-Wissowa, on ne peut que répéter ce que disait Wilamowitz de l'article *Hadrianutherai* du même auteur: "Der Artikel war immer unbrauchbar und ist nun erledigt" (*Sitzungsber. Ak. Berl.*, 1925, 333, n. 2).

C'est sur cette acropole qu'a été trouvée la tête archaïque. Une terrasse, longue d'environ 25 mètres et profonde d'autant, était supportée sur un mur de soutènement hellénique (fig. 1). Au dessous, à une basse époque, on a élevé un autre mur de soutènement à arcades (fig. 2): on a eu ainsi une sorte de portique, dont le fond



Fig. 1.—Le Mur de soutènement du temple de Zeus

était formé par le soutènement hellénique, et qui a été divisé, dans le sens de la profondeur, en trois parties, par deux murs de basse époque. Dans ce portique, en contrebas de la terrasse du temple, ont roulé, lors de la destruction du temple, des débris, qui y ont été conservés sous une épaisse couche de terre. Les paysans, en déblayant ce portique, y ont trouvé la tête archaïque.

En même temps, ils ont découvert une série d'inscriptions, toutes du même type, gravées l'une sur une base, les autres sur des fragments de colonnes de marbre blanc non cannelées, chacune au milieu d'une couronne; il y en a huit de ce type:

> Εὐσεβὴς ἰερεοὺς Πο. Αἴλιος Ἰάσων καὶ ἡ γυνὴ αὐτοῦ

On mentionne aussi deux fois le νεωκόρος.

Or l'une de ces inscriptions ne laisse pas de doute sur la divinité que servaient ces prêtres. Je donne ici (fig. 3) une photographie du revers de la base qui porte une

Mineure de H. Grégoire, mais à tort. Falkener, le premier, avait en 1844–45 copié des inscriptions à "Garrimay"; l'éditeur de ces inscriptions, H. Henzen, Annales Inst. Corresp. Arch. 1852, 135–136, n. 1–4, les a attribuées à Aphrodisias, supposant dans les environs un village de "Garrimay" qui n'existe pas; il a été suivi par tous les érudits, notamment Kirchhoff, Waddington, Ramsay, Grégoire. La preuve que Falkener a copié ces inscriptions non pas auprès d'Aphrodisias, mais à Gereme-Keramos, c'est qu'il donne comme copiées aussi à Garrimay les deux inscriptions d'époque romaine que Hicks a publiées, J.H.S., 1890, 123, n. 6 et 126, n. 9 sans s'apercevoir qu'elles étaient déjà dans Henzen, loc. cit. n. 1 et 2 (et la première dans Le Bas-Waddington, III, 1592 et Liermann, Analecta epigraphica et agonistica, Diss. Phil. Hal. X., p. 38), mais parmi les inscriptions d'Aphrodisias; Hicks tenait sa copie de Paton, et j'ai revu les pierres dans les ruines des monuments de la plaine.



Fig. 2.—Mur de souténement à arcades, derrière les maisons du village



Fig. 3.—Base à la double hache



Fig. 4.—La plaine de Keramos, vue du sanctuaire de Zeus. Parmi les maisons, importants vestiges d'édifices romains

de ces inscriptions de prêtres; on y a sculpté la double hache, emblème du Zeus Carien.¹ Les monnaies de Keramos ² montrent que le Zeus Carien était la principale divinité de la ville; sur les autonomes, on a au droit la tête de Zeus, au revers l'aigle; les monnaies de l'époque impériale montrent différents types de Zeus, notamment avec la double hache. Nous apprenons où était son sanctuaire; c'était l'édifice où on a retrouvé les inscriptions de ses prêtres avec la base ornée de la double hache et la tête archaïque.³ Cet endroit était d'ailleurs tout désigné pour être la demeure de la divinité principale; à ses pied s'étend la plaine (fig. 4), puis la mer que barre

à l'horizon la ligne régulière et majestueuse des monts de la

Chersonèse.

Puisque le Kouros dont on a retrouvé la tête a orné le sanctuaire de Zeus, jusqu'à la fin du paganisme sans doute, il me paraît in-

Figs. 5 et 6.—Monnaies de Keramos

téressant de donner ici une reproduction de deux monnaies de Keramos conservées au Cabinet de France.

La première (fig. 6) représente deux divinités: à droite, un dieu barbu, drapé, appuyé sur un sceptre; à gauche, une divinité allant vers la droite, qui semble bien tenir une double hache; or cette seconde divinité est représentée en Kouros archaïque; la silhouette et la chevelure sont typiques.

C'est, je pense, la tête de cette statue

qui est représentée sur une monnaie qui porte au revers un bucrâne, le nom de monétaire  $\Lambda \dot{\epsilon} \omega \nu$  et la légende  $K \epsilon \rho a \mu u \eta (\tau \tilde{\omega} \nu)^5$ ; voir la figure 5.

LOUIS ROBERT

# II. TÊTE VIRILE ARCHAÏQUE

La tête, en marbre, est coupée assez régulièrement au milieu du cou; sa hauteur totale est de 0<sup>m</sup>, 24. Elle a subi plusieurs dommages importants: un morceau du crâne à gauche manque, le nez est en grande partie arraché, des épaufrures ont déformé la bouche et le menton, deux grandes fêlures balafrent la partie droite du

<sup>&</sup>lt;sup>1</sup> Je note à propos du Zeus Carien que c'est sans doute à tort que l'on croit reconnaître l'image du Zeus de Panamara sur les grands bronzes de Stratonikeia figurant un cavalier s'avançant vers un autel (c'est l'empereur); je donnerai la preuve dans mes Études anatoliennes que le Zeus de Panamara est un dieu qui tient la double hache et le sceptre.

<sup>&</sup>lt;sup>2</sup> Je m'étendrai là-dessus dans MAMA.

<sup>&</sup>lt;sup>2</sup> Guidi, *loc. cit.*, 395, avait cru retrouver le sanctuaire de Zeus dans un grand bâtiment d'époque romaine situé dans la plaine, loin de l'acropole (voir ici Pl. XL, A).

<sup>4</sup> Inv. Coll. Waddington, 2299: Caracalla. Revers: Καλλίστρατος 'Απολλωνίδ(ου) άρχ. Κεραμιητ (ων).

<sup>&</sup>lt;sup>5</sup> C'est sans doute une monnaie de ce type qui est décrite, Annuario, loc. cit., p. 472, 2, comme portant une "tête impériale de type égyptien, avec la chevelure stylisée en boucles tombant jusqu'au bas du cou."

<sup>&</sup>lt;sup>e</sup> Je ne connais la tête que par les photographies. Je n'ai donc pu examiner la nature du marbre. Certaines mesures de détail me manquent aussi. Dès sa découverte, cette tête a été signalée par M. Picard, Rev. E. gr. XLVI, 1933, 106.

visage et en plus d'un endroit, notamment au sommet de la tête, sur la chevelure et à l'arcade sourcilière, la surface du marbre est usée ou égratignée. Ces mutilations, si regrettables soient-elles, nous laissent cependant la possibilité de reconnaître non seulement la structure générale, mais encore certains traits particuliers et même l'expression du visage.

La tête est droite sur un cou solide, épais et cylindrique. Dès le premier coup d'oeil on la classera dans la catégorie des têtes rondes; pour n'être pas aussi massives que dans d'autres oeuvres archaïques, surtout de la même région,1 les proportions cependant sont assez trapues: le diamètre de la tête à la chevelure (0<sup>m</sup>, 19) doit être à peu près égal à la hauteur du front au menton; et la largeur doit être sensiblement la même dans le bas et dans le haut du visage. L'aspect rond de la figure est renforcé par la prédominance des lignes courbes et fuyantes et l'absence à peu près totale d'angles et de méplats. De plus, on est frappé par la régularité des courbes: au demi-cercle qui marque la limite de la chevelure et du front répond la ligne pleine et ronde du menton; l'arcade sourcilière semble dessinée au compas; même soin d'éviter la ligne trop droite dans les plis, plus raides cependant, qui entourent la bouche. De profil, nous vovons un crâne en boule et, opposé à la ligne extraordinairement fuyante du front et des cheveux rejetés en arrière,2 le contour arrondi de la bouche, de la fossette et du menton. La planche XLI, B.C. prise de trois-quarts nous montre avec quel soin le sculpteur a évité les transitions brutales: les pommettes, tout en étant saillantes, ne forment pas une arête et les maxillaires sont si enrobées de graisse, le dessous du menton si épais que l'on distingue à peine le passage de la tête au cou; la seule transition qui soit marquée avec un peu de maladresse, c'est, nous l'avons déjà dit, celle des joues au nez et à la bouche, ce qui s'explique par les difficultés qu'éprouvait l'artiste à rendre le sourire.

Cette rondeur des formes, ces contours gras ne servent pas à dissimuler l'ignorance du sculpteur, à esquiver les difficultés de l'anatomie. On ne saurait parler de boursouflure à propos de cette tête. La charpente osseuse ne tend pas les chairs, comme à la Caryatide de Cnide,³ par exemple, mais elle se devine sous leur matelas moëlleux: on sent l'os molaire sous le rebondissement des joues, et les maxillaires servent de charpente au modelé savant du menton.

Le rendu des différents organes témoigne lui aussi de la science du sculpteur: certes les yeux, en très mauvais état d'ailleurs, paraissent d'une taille excessive; leurs globes énormes, peu enfoncés sous l'arcade sourcilière, sont exorbités: mais leur mise en place est assez exacte: la paupière inférieure est presqu'horizontale, séparée de la joue, semble-t-il, par une légère gouttière; la paupière supérieure est au contraire assez arquée. Du nez, il ne reste que la trace: on voit que la base en était large et que l'espace entre elle et la bouche était fort petit. Le bas du visage paraît être la partie la mieux venue. La bouche est droite, la lèvre supérieure devait être assez fine, tandis que l'autre était épaisse et tombante: toutes deux s'amincissaient vers les coins pour se perdre dans l'ombre d'un repli de chair. Une fossette assez profonde se creuse entre la bouche et le menton: celui-ci est gros, assez proéminent, d'une courbe soigneusement dessinée, d'un modelé moëlleux qui cherche à rendre la

Par ex. Th. Wiegand, Ath. Mitt., XXXI, 1906, pp. 87-88 et pls. X-XII.

<sup>&</sup>lt;sup>2</sup> Sans doute le nez prolongeait-il encore cette ligne. 
<sup>3</sup> Fouilles de Delphes, IV, 2, p. 1.

douceur de la chair. On remarquera le pli, fort bien observé, qui, amorce encore peu sensible d'un double menton, fait le raccord entre le bas du visage et le cou.

La chevelure aussi est habilement traitée, avec un désir manifeste de variété: sur le front et les tempes, les cheveux rejetés en arrière sont séparés en fines mèches ondulées, qui paraissent former deux étages; sur la nuque au contraire ils retombent d'une façon beaucoup plus banale, en une nappe massive que sillonnent régulièrement des plis verticaux et horizontaux (figs. 7, 8). Derrière les oreilles passent, de chaque côté, deux nattes qui devaient descendre sur les épaules et la poitrine. De cet effort de variété, nous ne saurions du reste faire exclusivement honneur à l'artiste



qui a sculpté cette tête: dans les régions voisines, à Didymes, à Rhodes peut-être,¹ d'autres avaient déjà voulu rendre la disposition des cheveux différente sur le front et sur le crâne, mais, malgré la régularité maladroitement monotone des mèches qui encadrent le haut du visage, cette variété est ici rendue avec beaucoup plus de naturel.

Puisque nous en sommes à vanter les mérites du sculpteur, il nous faut ajouter qu'il ne s'est pas borné à reproduire avec conscience les traits d'un visage humain. On peut dans ces traits trouver une expression: ce visage respire la satisfaction; autant que le sourire, ces joues rebondies d'homme bien nourri, cette bouche sensuelle manifestent l'amour de la vie facile qu'on attribuait aux Ioniens; et le sourire même ne réside pas seulement dans le pli traditionnel, un peu trop sec, des joues autour du nez; il est aussi dans la fossette du menton, dans les commissures des lèvres; il se joue dans tout le visage auquel il donne l'air presqu'aussi dédaigneux que

<sup>&</sup>lt;sup>1</sup> Voir les rapprochements que nous indiquons plus loin.

satisfait. Nous ne pouvons juger, dans l'état actuel, si les yeux ajoutaient à l'expression; on en doute un peu en voyant ces énormes globes exorbités, qui n'ont jamais dû être bien vivants.

D'ailleurs les qualités que nous avons signalées et l'effort de l'artiste vers l'observation exacte ne doivent pas nous aveugler sur ses insuffisances; si elle s'en dégage par certains côtés, par d'autres, l'oeuvre reste toute imprégnée des anciennes traditions. Nous avons déjà parlé du traitement archaïque des yeux et de la contraction des joues, la base du nez est trop rapprochée de la bouche, les tempes trop larges. L'oreille est très caractéristique: elle est placée trop en arrière, et trop grande, et sa structure intérieure n'est indiquée que sommairement; mais la forme générale est juste et l'amincissement vers le bas est bien observé; ici, comme dans le traitement de la chevelure, une observation juste est gênée dans sa réalisation par une technique encore maladroite. Et c'est là l'impression d'ensemble qui se dégage de cette tête, singulier mélange de fidélité aux procédés d'école et d'aspiration vers la nouveauté.

M. E. Langlotz voudrait que l'on datât les oeuvres médiocres d'après ce qu'elles contiennent de plus nouveau, les autres au contraire d'après les éléments anciens dont leurs auteurs n'ont pas encore su se débarrasser. Cette règle, dont l'application laisse au jugement personnel une part terriblement grande, se révèle inefficace lorsqu'il s'agit, comme ici, de situer un morceau isolé où voisinent, sans qu'on puisse dire lesquelles prédominent, des tendances assez différentes. La tâche serait plus aisée si le corps de la statue était conservé. Ce corps, on doit l'imaginer sans doute comme celui d'un Kouros,² mais il n'est pas impossible non plus de se représenter notre tête comme posée sur une statue assise, analogue à celles des Branchides.

Car si même elle n'avait pas été trouvée à Keramos, c'est évidemment aux écoles de la côte anatolienne qu'on l'aurait sans hésitation attribuée. Elle possède au plus haut point les traits qui caractérisent la sculpture de cette région, les proportions trapues, les contours arrondis, les formes grasses, les traits lourds. De ce fait, et aussi à cause du lieu où il a été découvert, ce document prend une importance exceptionnelle.

De l'art archaïque d'Asie Mineure, nous possédons surtout des terres cuites et des bas-reliefs, instructifs par leur "remarquable conformité dans leurs caractères généraux" 3: c'est d'après eux surtout qu'on a déterminé ce qui faisait l'originalité de l'Anatolie dans le développement de l'art grec. Mais rares sont les morceaux de ronde bosse qui nous sont parvenus, et plus rares encore les têtes archaïques. La tête de Keramos, par son origine non douteuse, peut donc servir de point de repère dans le classement encore incertain des écoles et des oeuvres qui se rattachent à l'Asie Mineure.

Ce n'est point un classement de ce genre—on en a déjà proposé plusieurs 4—que nous prétendons tenter ici; il exige encore d'autres trouvailles pour être repris avec

<sup>1</sup> Voir Déonna, Apollons archaïques, pp. 96, sqq. et pl. VI.

<sup>&</sup>lt;sup>2</sup> On a cru autrefois qu'il n'y avait pas de Kouroi ioniens. Voir Déonna, op. cit., p. 290.

<sup>&</sup>lt;sup>3</sup> S. Reinach, B.C.H., XIII, 1889, p. 550.

<sup>&</sup>lt;sup>4</sup> Picard, Sculp. ant., pp. 287-308; Déonna, l. c., pp. 285-306; Dédale, II, pp. 39 sqq. indiquent ces tentatives de classement. Voir aussi Langlotz, Frühgr. Bildhauersch., pp. 103 sqq. et 118 sqq.

profit. Nous voudrions simplement situer la tête de Keramos parmi celles qui lui sont apparentées.

Pour la plupart, ces autres têtes appartiennent à une même école, dont les deux centres paraissent avoir été Samos et Milet;¹ d'autres, de tendances voisines, mais quelque peu différentes, pourraient venir des grandes cités de la région, Rhodes ou Ephèse.

Par sa forme, la tête de Keramos affirme sa parenté avec les monuments les plus anciens que nous connaissions de l'art samio-milésien, le Branchide B 271 <sup>2</sup> et la statue samienne publiée par Wiegand <sup>3</sup>; une autre tête, trouvée à Olbia, <sup>4</sup> mais provenant sans doute de Milet ou de ses environs, appartient au même groupe; ces trois têtes sont malheureusement si mal conservées qu'il est difficile de pousser très loin la comparaison. On y voit cependant, comme dans la tête de Keramos,—qui leur est nettement postérieure—, se manifester la prédilection de leurs auteurs pour les formes rondes et grasses: même, l'inhabileté du sculpteur a rendu plus sensibles encore certains traits particuliers; la tête samienne est excessivement large par rapport à sa hauteur, elle est engoncée dans les épaules et son ossature disparait complètement sous la graisse: ce sont là des défauts qui s'effaceront, mais d'autres détails communs à tout le groupe montrent combien est étroite la parenté entre les têtes: la chevelure par exemple, qui avance sur les tempes, puis, séparée du front par une ligne régulièrement incurvée, est rejetée en arrière, ou encore les lèvres épaisses, le menton rond, les oreilles grandes.

Cette structure de la tête, tout en étant très milésienne, n'appartient pas cependant d'une manière exclusive à cette école. Si nous regardons de profil la tête de Keramos et celle du Kouros de Naucratis,<sup>5</sup> nous constaterons une analogie assez frappante dans la ligne fuyante du front, dans le raccord du cou au menton et aussi dans le modelé rebondi des joues;<sup>6</sup> mais le sculpteur de Naucratis est moins habile et surtout il n'a pas su animer son oeuvre.

Si en effet nous avons rapproché la tête de Keramos de celles que nous venons de mentionner, c'est parce qu'elles appartiennent toutes au même type physique; mais l'analogie ne va pas plus loin et il y a un fossé entre la statue samienne, par exemple, sans vie ni pensée, et la tête malicieuse et ironique dont nous nous occupons.

Un autre groupe nous montrera comment se sont peu à peu animées les physionomies: il comprend une tête du musée de Constantinople, une de Berlin, une de Londres; la dernière vient d'Hiéronda; les deux autres sont d'origine contestée, la première ayant peut-être été apportée de Rhodes, l'autre passant, peut-être à tort,

<sup>2</sup> British Mus. Catal., 1928, I, 1, p. 106, pl. IV.

<sup>9</sup> British Mus. Catal., I, p. 114, fig. 174; N° B 283.

<sup>&</sup>lt;sup>1</sup> Déonna. A pollons arch., p. 285; Dédale, II, pp. 39 sqq.

Ath. Mitt., 1906 (Th. Wiegand), p. 87, pls. X-XII; Curtius, ibid., pp. 165 sqq.
 J.H.S., 1924, p. 46, fig. I.
 British Mus. Catal., p. 190, pl. XLIB; N° B 451.

<sup>&</sup>lt;sup>a</sup> L'analogie n'est pas pour surprendre: on sait les fréquents échanges qui unirent, à l'époque archaïque, Naucratis et l'Ionie, notamment Milet. V. par ex. Prinz, Funde aus Naukratis, pp. 109 sqq.; Déonna, Ap. Arch., p. 298.

Mendel, Catal, du Musée de Constantinople, II, N° 530 (avec bibliographie). Cette tête est classée comme samienne par Langlotz, l. c.
<sup>8</sup> Berlin, Beschreibung, N° 538.

pour avoir été trouvée à Périnthe. De ces trois têtes, que l'on met toujours côte à côte, celle de Constantinople (fig. 9) est la plus proche de la nôtre. Certes la structure n'est pas absolument la même, le visage était plus allongé; à cela près, la parenté est frappante, la mise en place des différents organes est analogue, nous retrouvons cet amour des lignes courbes (demi-cercle de la chevelure autour du front, régularité des arcades sourcilières); nous noterons même un détail plus particulier: l'essai, très timide encore, de varier le rendu des cheveux sur le front et sur le sommet du crâne. Mais la ressemblance essentielle n'est pas là; elle réside dans l'expres-

sion, dans le sourire qui épanouit tout le visage, tout en serrant de la même façon les lèvres aux commissures. Et dans les deux cas, mais d'une façon beaucoup plus habile dans l'oeuvre qui nous occupe, ce sourire donne au visage l'aspect plus ironique que joyeux.

Le monument dont s'approche le plus, à notre avis, la tête de Keramos est un beau masque d'Ephèse,³ actuellement à Londres (fig. 10). Si on le regarde de face, on verra qu'il s'apparente à elle non seulement par le moëlleux du modelé ou par la lourdeur des traits, mais surtout par l'expression peu nette qu'il produit: son sourire est assez doux mais en même temps narquois, et V. Müller lui trouvait un air de suffisance peu agréable.¹ Il se peut que les mutilations qu'il a subies lui soient favorables, que l'absence de crâne affine le visage, mais l'expression semble rendue avec beaucoup plus de finesse que



Fig. 9.—Tête de Constantinople

dans la tête de Keramos: cela s'explique-t-il par une différence de date, ou par la supériorité d'un artiste, nous ne saurions le dire, mais ce qui est certain, c'est que les deux oeuvres sont inspirées par le même esprit.

Les comparaisons que nous avons faites avec d'autres monuments ne peuvent nous donner qu'une chronologie relative puisqu'eux-mêmes ne sont pas datés exactement. Par la technique et la liberté d'expression, la tête de Keramos se révèle d'un art plus accompli non seulement que le Branchide ou la statue samienne, mais aussi que la tête de Constantinople; elle se rapproche davantage, sans l'égaler, du masque de Londres. Mendel, avec beaucoup de vraisemblance, plaçait la tête de

<sup>1</sup> De Ridder, dans une classification qui n'a pas eu de succès, distinguait une école de Rhodes, aux visages triangulaires (Catal. des bronzes de l'Acropole pl. XII-XIII).

<sup>2</sup> Nous retrouvons cet essai de variété sur une tête primitive féminine, à Ephèse (*British Mus. Catal.*, p. 51, pl. V, N° B, 91). Notons en passant que l'habitude de rejeter les cheveux en arrière au dessus du front et des tempes semble ionienne; Déonna (*Ap. arch.*, p. 112) la signale sur des têtes provenant de Milet, d'Egypte et sur notre tête de Hiéronda; cf. Mendel, *Catal. de Constantinople*, N° 241.

<sup>2</sup> British Mus. Catal., p. 50, pl. IV, N° B 89.

<sup>4</sup> Arch. Anz., 1921, p. 232.

Constantinople vers le milieu de VI° siècle. Nous savons d'autre part que les sculptures d'Ephèse ne sont pas antérieures à 550, mais la décoration de l'Artemision de Crésus s'est poursuivie pendant des années, et le masque de Londres, s'il n'est pas une réussite individuelle,¹ en avance sur son époque, ne doit pas être du début des travaux. Nous pouvons donc sans invraisemblance placer la tête de Keramos dans le troisième tiers du VI° siècle.²

La tête de Keramos n'est qu'un document encore assez isolé, on le voit. Il serait imprudent de le prendre comme point de départ pour procéder à un classement des

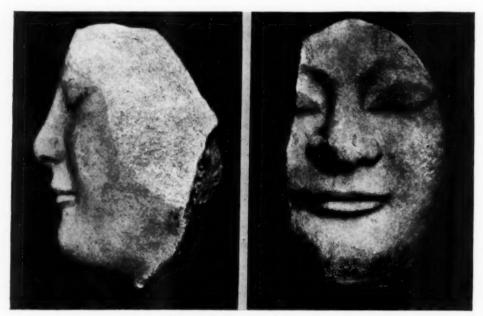


Fig. 10.-Masque de Londres

écoles d'Asie Mineure. Mais on peut constater du moins qu'elle n'apporte rien de très imprévu; les caractères que nous lui avons reconnus se retrouvent tous aussi bien dans les terres cuites que sur les reliefs ou les monuments de ronde-bosse provenant de la Grèce orientale. On peut même dire qu'elle semble confirmer les théories anciennes contre l'hypothèse récente de M. Langlotz. Celui-ci, tout en négligeant les autres cités qui ont pu être des foyers d'art en Asie Mineure, a séparé violemment Samos de Milet selon le degré de vie spirituelle qu'il lisait sur les statues. Cette idée intéressante est dangereuse. Outre qu'elle laisse trop de place au jugement individuel du critique, elle a le tort de s'appuyer surtout sur le témoignage des terres cuites et des petits bronzes (lesquels, d'ailleurs, peuvent si facilement voyager que leur provenance n'apporte pas toujours un argument décisif). Or, ceux-ci ont une

<sup>&</sup>lt;sup>1</sup> On trouve un fragment qui lui ressemble British Mus. Catal., ibid., N° B 88.

<sup>&</sup>lt;sup>2</sup> Le comparaison avec un morceau de même famille, mais évoluée dans un autre sens, comme la Caryatide de Cnide ne peut être très instructive.

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grande valeur instructive lorsqu'il s'agit de renseigner sur les types physiques, la structure du corps; mais leur expression est parfois trompeuse; œuvres d'artistes de second ordre, elles ne peuvent nous renseigner qu'insuffisamment sur ce qui est l'aboutissement de l'art, et certains exemples cités par Langlotz prouvent peut-être plutôt l'ignorance et la maladresse du coroplaste que les tendances d'une école. Sa théorie sur la spiritualité de la sculpture samienne l'oblige à donner à Milet la grande statue trouvée à Samos par Wiegand; elle lui fait attribuer à Samos la tête de Constantinople, si semblable, nous l'avons vu, aux sculptures milésiennes, et dans laquelle les progrès de l'expression sont dus beaucoup plus au perfectionnement de la technique qu'à une conception différente de la vie chez leurs auteurs. La tête de Keramos, nous l'avons vu, semble se réclamer de toutes ces tendances d'Asie Mineure; nous avons pu la comparer à une tête de Naucratis, elle est ronde comme celle des Branchides, souriante comme celle d'Ephèse ou celle de Constantinople—qui vient peut-être de Rhodes. Et nous aurions pu développer les comparaisons, déjà faites à propos de tous les monuments trouvés en Asie Mineure, avec les terres cuites 1 ou avec les reliefs de régions voisines mais assez différentes, comme Xanthos ou même Assos.

Nous pensons donc, avec M. Picard, qu'il n'y a guère "en Asie de filiations d'écoles, de centres distincts," <sup>2</sup> qu'il y a plutôt "un courant ionien de l'est," <sup>3</sup> et nous croyons que la tête de Keramos ne fait que confirmer ce que disait déjà autrefois Collignon: "A n'en pas douter, l'Ionie est le centre d'une grande école grecque orientale dont l'unité est incontestable. Elle est une en effet depuis le littoral de la Troade jusqu'à l'île dorienne de Rhodes." <sup>4</sup>

Decembre 1933.

<sup>&</sup>lt;sup>1</sup> Voir notamment Winter, Die Typen der figürlichen Terrakotten, III; Heuzey, Catal. des figurines; Blinkenberg, Lindos, Fouilles et recherches; Brit. Mus. Catalogue of Terra Cottas; etc.

<sup>&</sup>lt;sup>2</sup> Picard, Sculpture antique, I, p. 295.

<sup>&</sup>lt;sup>3</sup> Ch. Picard et P. de la Coste-Messelière, Fouilles de Delphes, IV, 2, p. 15.

<sup>&</sup>lt;sup>4</sup>Collignon, Sculpture antique, I, p. 188. Une tête trouvée à Rhodes confirme cette théorie (Clara Rhodes, V, 2, p. 78, fig. 50).

# THE FOUNTAIN OF LERNA AND THE EARLY CHRISTIAN CEMETERY AT CORINTH

#### PLATE XLII

By way of supplement to my previous report on the Asklepieion, I wish to present briefly the results of the excavation, mainly in 1932 and 1933, of the Fountain of Lerna and the Early Christian Cemetery.2

The complex of buildings and constructions which we call Lerna occupies a geo-

F. J. de Waele, "The Sanctuary of Asklepios and Hygieia at Corinth," in A.J.A. XXXVII, 1933, pp. 417-451.

<sup>2</sup> It is a pleasant duty to acknowledge the cooperation of, and to express my gratitude to Professor Rhys Carpenter, director of the School until 1932, and to Professor Richard Stillwell, his successor. I am indebted also to Mr. B. H. Hill for valuable advice, to Messrs. J. M. Shelley and G. V. von Peschke for drawing the plan of the area, to Miss Katharine Edwards for the study of the coins, to Mr. Herman Wagner for his professional work of photographing and to our workman, Anastasios Papanastasiou, who acted as a foreman for the first time.

In this report the various details are indicated by Greek and Latin letters, as follows:

A: Acrocorinth (Pl. XLII A).

a: temple of Apollo (Pl. XLII A).

AS: promontory of the Asklepieion (Pl. XLII A, Fig. 1).

C: hill of Cheliotomylos (Pl. XLII A).

H: intermediate slope and hills between plateau and plain (Pl. XLII A, B, Fig. 1).

L: hollow of Lerna (Pl. XLII A)

R: ravine of Cheliotomylos (Pl. XLII A).

V: promontory of old Venetian fortification (Pl. XLII A).

Z: promontory of the temple of Zeus (?) (Pl. XLII A, B).

α: area of the temple of Asklepios (Pl. XLII, Fig. 1).

7: west hall of the precinct of the Asklepieion (Fig. 1). ηα: traces of pre-Hellenistic road to Lerna (Fig. 1).

ηβ: sarcophagi of pre-Hellenistic cemetery (Fig. 1).

θ: covered street with early Christian partition walls (Fig. 1).

λ: north shops of the Asklepieion (Fig. 1).

μ: propylon (?) of Lerna (Fig. 1)

v: houses of the abaton of the Asklepieion (Pl. XLII A, B, Fig. 1).

π: lower fountain of Lerna (fountain of Kriebardi) (Pl. XLII A, Fig. 1)

σα: first reservoir (below the Asklepieion) (=cavern I) (Fig. 1, Pl. XLII B). σβ: spring house of upper Lerna (=cavern II) (Fig. 1, Pl. XLII B).

σβα: remains of the classical period in upper Lerna (Fig. 2).

 $\sigma\beta\beta$ : remains of the early Byzantine period (altar) in upper Lerna (Fig. 2).

 $\sigma\beta\gamma$ : remains of the medieval period (provision holes) in upper Lerna (Fig. 2).

σγ: second or central reservoir of Lerna (=cavern III) (Fig. 1).

σδ: third reservoir of Lerna (=cavern IV) (Fig. 1).

σε: fourth reservoir of Lerna (=cavern V) (Fig. 1). σζ: fifth reservoir of Lerna (=cavern VI) (Fig. 1).

ση: communicating channels between the reservoirs (Fig. 1).

τ: square of Lerna (Fig. 1, Pl. XLII B).

τα: north portico of Lerna square (Fig. 1, Pl. XLII B). τβ: east portico of Lerna square (Fig. 1, Pl. XLII B).

77: west portico of Lerna square (Fig. 1, Pl. XLII B)

τδ: south portico of Lerna square (Fig. 1, Pl. XLII B). φ: north shops of Lerna (Fig. 1, Pl. XLII B).

χγ: great drain of Lerna (Fig. 1).

χδ: channels in front of the caverns (Fig. 1).

ωα: early Christian burials (Fig. 1).

ωα ← →ωα: early Christian cemetery of Keramidaki (Pl. XLII A).

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logical bay or hollow just west of the hill of the sanctuary of Asklepios at the northern edge of the great plateau overlooking the Corinthian plain (Pl. XLII A, L). The former shape of this hollow was considerably changed when the entire north side of the city was built over on a monumental scale after 338 B.C.¹ The present width at the north side is about 50 M., the greatest depth some 35 M. The abaton of the Asklepieion (Pl. XLII A, B, Fig. 1,  $\nu$ ) and a kind of vestibule (Fig. 1,  $\mu$ ) continuing the covered street (Fig. 1,  $\theta$ ) south of the temple hill, occupied the east stretch of Lerna hollow and are described in my previous report.

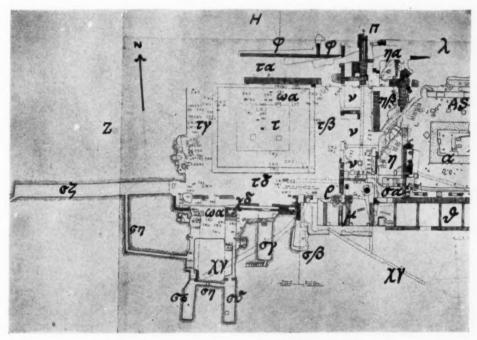


FIG. 1. - PLAN OF LERNA AND SURROUNDING AREA

The main part of this geological bay is occupied by the remains of an elaborate water-system, including a cavern with a spring (Pl. XLII B, Fig. 1,  $\sigma\beta$ ), five large reservoirs and a network of subterranean channels. These channels convey the water of the spring and of other still partly unexplored sources, and in ancient times conveyed the rainwater of Lerna square to the lower fountain of Lerna, at the edge of the plateau (Pl. XLII A, Fig. 1,  $\pi$ ). This lower Lerna was flanked on both sides by a row of shops (Fig. 1,  $\lambda$ ,  $\varphi$ ), the threshold of which was some 7 M. below the level of the square (about 44 M. below the stylobate of the temple of Apollo).

Although we possess no literary or epigraphic evidence to confirm our identification of this complex with the "so-called fountain of Lerna," as Pausanias says,<sup>2</sup> it

<sup>&</sup>lt;sup>1</sup> F. J. de Waele, l.c., p. 425.

<sup>&</sup>lt;sup>2</sup> Pausanias II, 4, 5.

is almost beyond doubt that the remains of constructions around the large square really belong to Lerna, which is mentioned also by Lucian 1 and perhaps by Athenaeus.2 In the narrative of the periegete the fountain of Lerna is described together with the old gymnasium, the Asklepieion and the temple of Zeus, and one can hardly imagine that there is still another complex of constructions for water-supply in the immediate vicinity of the Asklepieion which better deserves the name than the one

discovered in these cam-

paigns.

Fig. 2. - Inside View of Spring-House of Upper Lerna from THE NORTH

Very little was found which is indicative of the pre-Hellenistic existence of the fountain of Lerna in this geological bay. A few traces left in the hard vellow clay and belonging to a former road with analemma (Fig. 1,  $\eta \alpha$ ) are visible in the northeast corner of the area below the substructures of the west hall of the Asklepieion (Fig. 1,  $\eta$ ). Three sarcophagi of children (Fig. 1,  $\eta\beta$ ), south of this road, are the scanty remains of a burial place, already discussed, of the fifth century B.C.3 The earlier street led by an ascending slope to the cavern with the spring south of the central square. It is not probable that the large reservoirs west of the spring house existed before 338 B.C. To work out the general plan of the reconstruction and embellish-

ment of the city intended by the Corinthian municipality at the beginning of the Hellenistic period, a considerable portion of the adjacent rock and layers of clay were cut down and the bottom of the hollow was filled to the high level (some 37 M. below the stylobate of the temple of Apollo) which supported the central square, a rectangle

Lucian, Quomodo historia conscribenda sit, 29, where a walk across the city is described as ἀπὸ τοῦ κρανείου έπὶ τὰν Λέρναν.

<sup>&</sup>lt;sup>2</sup> Athenaeus, Deipnosoph. IV, 156 e: in a discussion of philosophers the question is raised whether the water of Peirene or that of Lerna is the sweeter. This seems to be more probably an allusion to the famous fountain of Lerna near Argos. <sup>3</sup> F. J. de Waele, l.c., p. 424.

of 18 by 20 M. (Fig. 1, Pl. XLII B,  $\tau$ ). It was surrounded on its four sides by a portico. The pavement of this square and its peristyle is largely preserved (Pl. XLII B, Fig. 1,  $\tau\alpha$ ,  $\tau\beta$ ,  $\tau\gamma$ ,  $\tau\delta$ ).

By far the most important portico was the southern one (Fig. 1, Pl. XLII B,  $\tau\delta$ ). On its eastern extremity was the entrance to the street of the Asklepieion and the L-shaped reservoir (Fig. 1,  $\sigma\alpha$ ), both already described. Opposite this cavern which collected the rainwater of the hill of Asklepios and tunnelled into the hill we assume to have been the site of the temple of Zeus, was another cavern or reservoir



Fig. 3.-Inside View of the Sixth Cavern from the East

with drains and manholes. Along the south side of the portico were the entrances of three other reservoirs and a spring-house. The whole arrangement was made on the basis of an almost perfect symmetry. One cavern (Fig. 1,  $\sigma\gamma$ ) is almost exactly in the north-south axis of the square. The street leading down to Lerna hollow ended east of the three central caverns. If we include this covered street, it is obvious that the south side of Lerna hollow was pierced almost symmetrically by seven apertures, five of which were the entrances or openings of reservoirs (I, III, IV, V, VI) (Fig. 1,  $\sigma\alpha$ ,  $\sigma\gamma$ ,  $\sigma\delta$ ,  $\sigma\epsilon$ ,  $\sigma\zeta$ ) and one of the fountain of Lerna (cavern II) (Fig. 1,  $\sigma\beta$ ). The capacity of these five reservoirs was about 200 cubic meters (Fig. 3).

Except for the authors already mentioned, ancient literature is silent about

Corinthian Lerna. No inscriptions referring either to the place or to its name were found in the three campaigns. The myth of the Hydra is connected in its remotest origin with the swampy field in the alluvial land of Nauplion, where the far more famous fountain of Lerna near Argos was located. Here the monster was killed by Herakles and Iolaos <sup>1</sup> and Lerna itself is to be interpreted more as a geological or natural phenomenon, disguised in a mythological dress. From Argos it was transferred to Corinth, and this may have happened as well in the days of Pheidon as in the five years of the great "synoikismos" when Corinth was considered to be a part of Argos and lodged in its citadel an Argive garrison (392–387 B.C.).<sup>2</sup> Perhaps a similarity of waterflow and many channels caused this transfer of name.

Very little is known about the Greek and Roman history of Lerna, except its building in Hellenistic times and its destruction in the later Roman period. The sack of the city by Mummius in 146 B.C. does not seem to have altered the aspect of this part of the city. From the fact that many yellow roof-tiles and fragments of decorated architectural terracottas, generally dated in Hellenic and Hellenistic times, were found in the layers of the last destruction, we are justified in concluding that the buildings of Lerna as well as the buildings of the sanctuary of Asklepios continued their existence all through the century of the desolation of the city (146–44 B.C.).

The final blow to the existence of the Corinthian summer resort was given in the middle of the fourth century after Christ. It is not impossible, however, that already before that date there was a general decay in this part of the Isthmian city, caused as well by frequent earthquakes as by the increasing enmity of paganism. Perhaps as early as the reign of Constantius II (337–361 A.D.), or somewhat later in the period of the general attack on paganism of the Christian communities all over the empire, the already impending ruin of Lerna was completed, the buildings torn down and the fragments of architecture reused in other constructions and in the early Christian partition walls of the street. Wheel-ruts, which are the result of the transport of stones after this annihilation of Lerna, are still visible on the pavement of Lerna square.

During quite a number of years after this destruction the site was used as a refuse-hole and a place for dying animals, as many skeletons of large quadrupeds seem to testify. From the débris of the demolition, dust and rain, refuse-heaps, and annual vegetation, the accumulation of the different layers above the former square and its porticoes had reached a height of from 0.60 M. to 1.20 M. when the Christians started to use it as a burial-ground. The level of early Christian times is clearly indicated by a peculiar type of grave consisting of a roof of tiles above the body and, at the ground level, a stucco-covered, semicylindrical mound, the covering of which continues on all sides the level of the burial ground, about one meter above the roof of tiles. Another type of grave, mainly found on the hills east and west of Lerna hollow, is that of the rectangular coffin, cut out in the surface of the rocky hill and covered by a square slab. Many other graves were hewn in the clay and rock sides of

<sup>&</sup>lt;sup>1</sup> A. Furtwängler, "Herakles," in Roscher, Lexicon der Mythol. I, col. 2198, 2223, 2243; Sittig, "Hydra," in P. W., Realencycl. IX, col. 40-50; Meuli, "Lerna," op. cit., XII, col. 2085-2093.

<sup>&</sup>lt;sup>2</sup> Xenophou, Helten. IV, 8, 34; V. 1, 34; Plutarch, Agesil. 21; Th. Lenschau, "Korinthos," in P. W., Realencycl., Suppl. IV, col. 1028.

Lerna hollow, but most of the burials had the shape of a roof consisting of from one to three tiles on either side of the body (Fig. 1,  $\omega \alpha$ ). Some children were buried in large pithoi, 0.70 M. high. Many sepulchral inscriptions, apparently not found in situ, are interesting in connection with minor questions concerning private life in this period of decadence. Names of professions (κάπηλος, No. 1143) and countries ('Ανατολικός, No. 1019) and also nicknames (κυρτός, the hunchback, No. 1135, κατά[κ]ρανος, No. 1137) are now usual instead of the father's or grandfather's name after the old Greek fashion. One inscription mentions the price of a grave, one and a half gold pieces or solidi (No. 1135) and the same inscription has the interesting formula: ἴασεν νεοφωτιστόν, "he died shortly after his baptism." Another fragment contains a curse addressed to future grave-robbers (No. 1174). A total of 315 burials, including the 75 tombs of the exploratory trenches of 1933, were found in the three campaigns. This number, however, does not convey an adequate idea of the extent of the Early Christian Cemetery (Pl. XLII A,  $\omega\alpha \rightarrow +\omega\alpha$ ) at the north side of the city. All over the field of Keramidaki, the Christian Corinthian community buried its dead, and the tomb and sepulchral inscription of Maria, wife of Euplous, near the ravine of Cheliotomylos (Pl. XLII A, R, C), almost half a mile distant from the westernmost graves 2 belong to the same Early Christian Cemetery, where many thousands of Christian Corinthians were buried in a period of some 170 years. The first graves date from the second half of the fourth century after Christ and the latest date of burial is probably given by the finds of cavern V of Lerna (Fig. 1,  $\sigma_{\epsilon}$ ). The southern part of this reservoir was transformed successively into a dwelling cave and a large place of common sepulture. Some seven cubic meters of decayed human bodies represent a burial en masse of about one hundred Corinthians. Many details of this sinister find and two coins of the emperors Anastasius I (491-518) and Justinian I (527-565), found among the bodies, justify our conclusion that these people were the victims of some disaster, undoubtedly of the terrible plague in the first decades of the reign of Justinian. This calamity completed the depopulation of Corinth after the great earthquake which, according to Procopius, nearly emptied the city of its inhabitants.3 An accurate observation of the position of many fallen blocks of rock in Lerna hollow gives us assurance that this is due in part also to one of the earthquakes of this calamitous time of seismic and epidemic disasters, which gave the final blow to the prosperity of Early Christian Corinth.4

The activity in the former area of Lerna in the middle of the seventh century A.D. must probably be considered an indication of a revival and repopulation of Corinth, which seems to have continued as the capital of the new Hellas created by Heraclius (610–641). Even after the destruction of the fourth century, the former spring-house was still used by the Corinthians who lived in the houses or shops built above the former street leading to the Asklepieion. About 650 A.D., a chapel, 10 M. long and 4

<sup>&</sup>lt;sup>1</sup> F. J. de Waele, l.c., p. 446, n. 4 and 5.

<sup>&</sup>lt;sup>2</sup> T. L. Shear, "The Excavation of Roman Chamber Tombs at Corinth, 1931," in A.J.A. XXXV,

<sup>&</sup>lt;sup>3</sup> Procopius (Bonn), III, 112, 1, 9; J. H. Finley, "Corinth in the Middle Ages," in Speculum (Cambridge, Mass.), 1932, p. 478.

<sup>&</sup>lt;sup>4</sup>The first great earthquake is to be dated before the plague of 542, the second one about 551 A.D.. cf. Finley, *l.c.*, n. 4.

M. wide, was built in front of the spring-house, and this cavern was transformed into a kind of "parekklision." Three coins of Constans II, datable between 641 and 651, give a terminus post quem for this early Byzantine reconstruction. Neither the name of the patron saint of this chapel nor the time of its destruction and the rebuilding of a smaller, still poorer oratory could be discovered. The fact that the tile floor of the second oratory was some 1.50 M. below the level of the modern field makes it possible



Fig. 4. - Female Statue of the Fifth Century B.C.

that the second chapel goes back as far as the time of peace and prosperity which preceded the fatal capture of the city by the Norman, Roger of Sicily, in 1147 A.D. Foundations of contemporary buildings were discovered around the church. It was ruined probably in the time of the Crusaders or under Turkish rule, but the ruins were still visible in later times, and this may account for the fact that the silver treasure, the military equipment of a Greek chieftain in modern times, described in a previous report, was hidden just west of the ruins of this medieval church.

Epigraphic evidence dating from this excavation of classical times proved to be extremely scanty. It consists of a large fragment of a triangular base with many victors' names of Roman times, among them a certain T.  $\Phi \lambda \dot{\alpha} \beta \iota os$  (= T. Flavius), moreover some graffiti on roof-tiles of Greek times (with the name Magideos) and some stamped amphora-handles. Again, a great quantity of late Roman and early Christian lamps and jugs was inventoried, but of more importance are moulds for similar lamps and the remains of what seems to be a potter's or lampmaker's oven. at the west side of Lerna hollow. Decorated architectural terracottas, fragments and sherds of Greek vases, loomweights and

rough, unpainted ware increased considerably the number of small objects from the Asklepieion. Many architectural blocks and fragments are a welcome help to a more or less hypothetical reconstruction of the entire complex of Lerna. A large fragment of a painted poros stele had been used as a threshold and this later use destroyed almost every detail which might have been of some importance for our knowledge of ancient painting and sepulchral representations.

By far the most precious piece found in the campaigns is a female statue of <sup>1</sup>F. J. de Waele, *l.c.*, p. 448.

somewhat coarse grained marble, without head, arms or feet, and badly battered all over the body (Fig. 4). It would seem to be a work of the first half of the fifth century B.C. and consequently a rare find for Corinth. The original height, about 1.40 M., was less than natural size and in its mutilated state it measures about 1 M. The left foot is advanced and the figure wears the Doric peplos with overlapping overfold, but without girdle. The folds are very simple and the style reminds one of the severe classical style of the art of Olympia. The polished right armpit is still visible and it is possible to see that the right arm was raised. This was perhaps the gesture of the left hand, too, and the whole attitude seems to indicate that the statue once represented a woman carrying some object on her head. There is a strong affinity with some female figures of the frieze of the Parthenon, although there is more severity and simplicity in the folding of the peplos. Its original function and location will probably never be determined nor the problem of its escape from the Roman pillage and auction of 146 B.C. be solved. The statue was deliberately mutilated in the fourth century after Christ, before it was thrown into the manhole in which it was found, together with some beautiful marble roof-tiles. Twenty-eight small holes on the back and shoulders, directly connected with the hair, form the only remaining detail of the head.

To present the archaeological resurrection of the Asklepieion, Lerna and the Early Christian Cemetery and to indicate their importance for our knowledge of the ancient Isthmian city will be the intention of the final publication of the "Asklepieion District" in the series of volumes on the excavations at Corinth.

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# THE DECORATION OF THE HELLENISTIC PERISTYLE HOUSE · IN SOUTH ITALY

#### PLATES XLIII-XLVI

THE HELLENISTIC STRUCTURAL STYLE AND SPATIAL EFFECT

In the evolution of ancient Italian decorative painting, the first two Pompeian styles of Mau form a chapter of their own. They stand out from the ornamental styles which precede and follow them by virtue of an underlying idea: their realistic emphasis on the structural nature of the wall. Not Italian in origin, but Greek, this structural treatment of the interior had its widest extension in Hellenistic times and its passing at the end of that period is lamented by one who received his training in the Hellenistic school, the Italian architect, Vitruvius. A comprehensive study of this widespread style lies outside the scope of this article, but as a prelude to such a study, an attempt may be made to isolate the appearance of the style in the South Italian field, where the evidence, particularly at Pompeii, is abundant and the development rich.

A general kinship, though not a close relationship between the two styles, has always been clear.<sup>2</sup> Rostovtzeff pointed out that the basic idea behind them both is the ornamental handling of the actual courses of the wall.<sup>3</sup> This ancient decorative scheme consists, in its original form, of a fourfold zone division, comprising "socle, intermediate portion, central wall and cornice." <sup>4</sup> The same arrangement forms the basis of decoration in Etruscan tombs. In these, however, the structural origin is so disguised by figured and tapestry elements as virtually to constitute an ornamental style.<sup>5</sup> In the Hellenic world, a clearer assertion of the structure of the wall makes itself felt. To the horizontal zone style succeeds imitation of a wall of squared stone.<sup>6</sup>

De Architectura, VII, V. 3.

<sup>&</sup>lt;sup>2</sup> A. Mau, Geschichte der dekorativen Wandmalerei in Pompeji, Berlin, 1882, pp. 128 ff.

<sup>&</sup>lt;sup>2</sup> J.H.S. 39, 1919, pp. 147 ff.

<sup>&</sup>lt;sup>4</sup> For the zone style, see R. Pagenstecher, Nekropolis, Leipzig. 1919, pp. 168 ff.; M. H. Swindler, Ancient Painting, New Haven, 1930, p. 325.

<sup>&</sup>lt;sup>5</sup> An ornamental use of the structural divisions of the wall for figured and tapestry effects appears in the Etruscan tombs from the first. See F. Poulsen, Etruscan Tomb Paintings, Oxford, 1922, p. 8, fig. 1 (the Campana Tomb); cf. the Tomb of the Triclinium, fig. 10. For textile coverings on the wall, N. Putorti, Neapolis, 2, 1914–15, p. 100, pl. 5. A simplified form of this ornamental style was in general use in Italy, the socle marked off by the textile wave pattern. Cf. A. Boethius, A.J.A. 1934, p. 163, who regards it as "a standardized type of decoration for atria." Signs of related treatment linger on in the House of the Faun (Mau, op. cit., p. 42, pl. I f.). A painted curtain socle with stucco incrustation appears in Pompeii in Reg. VI, 11, 10 (the House of the Labyrinth), 10, 7 and 14, 40; in the early second style in the House of the Faun, rooms 28 and 31 (Mau, pp. 37–38 and pl. III, 1). It appears also at Centuripe (G. Libertini, Centuripe, Catania, 1926, pp. 56 ff., pls. II–V and D). F. Wirth, Ath. Mitt. 56, 1931, p. 37, interprets the podium socle as characteristic of the West, since it is lacking in the eastern forms of the style. At Centuripe, the plinth-mounted eastern wall (pl. D, II and III), the textile covered socle (pl. IV), and the recessive socle (pl. V) occur in the same house, pointing to the adaptation of incrustation to an older western tradition. Cf. at Vulci the inner room in the François Tomb (A. von Gerkan, in F. Messerschmidt, Nekropole von Vulci, pp. 80 ff., fig. 69; cf. p. 113).

For the use of the word podium for the socle, cf. Vitruvius, VII, IV, 4

<sup>&</sup>lt;sup>6</sup> For this transition, Pagenstecher, op. cit., pp. 174 ff.

During the Hellenistic Age, the structural technique of incrustation affects exterior and interior decoration alike. On the exterior, facings of fine stone are applied to mask an inner core of rough material (cf. Pl. XLIII, 1). In the interior, these may be reduplicated either in stone or in stucco incrustation (Mau's first), or simply imitated on a flat painted surface. Toward the end of this period, a new perspective imitation (Mau's second) displaces in Pompeii a general use of the plastic form. This new method reproduces on the wall the structural disposition of its predecessor.

Closer analysis reveals the fact that these two styles are in reality chapters in a single evolution, in which interior decoration mirrors the trends at work within the house itself. In the plastic phase, an increase of verticality creeps in, to cover the lofty walls of an expanding architecture; in the painted, a growing tridimensional illusion compensates for a gradual reduction in the height of the room. In the case of both house and wall, it is the use of the column which permits this increase of spatial suggestion; in reducing the excessive height of the ceiling the use of barrel vaulting contributes to the development of the style.<sup>2</sup>

An interaction of vertical and tridimensional emphases early invades the horizontal blocks. On a wall of considerable height the superimposed bands require a contrasting verticality and coördination. This is supplied by pilasters or semi-engaged columns, either at intervals or at the join of subdivisions (cf. Pl. XLIII, 1, 2, 3).<sup>3</sup> A coördinating series placed in front of an unbroken wall (cf. Pl. XLIV, 1) produces an effect of the third dimension. Such an effect marches well with architectural expansion. To extend this spatiality is henceforth the purpose of the style.

The introduction of columnar effect necessarily reduces the visible area of struc-

<sup>1</sup> M. Bulard, Mon. Piot. XIV, 1908, pp. 174–75; Rostovtzeff, loc. cit., p. 150 (cf. E. Pfuhl, Malerei und Zeichnung der Griechen, Munich, 1923, vol. II, p. 871), reject Mau's term of incrustation for the first Pompeian style, Bulard, on the ground of the occurrence of painted ornamental bands which have no place in a system based on imitation of marble; Rostovtzeff, because he reserves the term for marble inlay with intarsiate effect. But incrustation is a structural, not an ornamental process (Vitruvius, II, VIII, 5), nor is it limited to marble. The term crusta is used of a variety of facings, whether marble (Pliny, Nat. Hist. XXXVI, 6, 6, 7, §47–48), stone (Vitruvius, II, VIII, 7), or stucco (Pliny, XXXV, 12, 45, §154; Vitruvius, VII, III, 10). For marble inlay, Pliny uses the term marmor interrasum, for pictorial effect in marble, vermiculatae ad effigies rerum et animalium crustae. These are opposed to the old-fashioned structural style, with its panels and vista effects (Pliny, XXXV, 1: non placent iam abaci, nec spatia montes in cubiculo dilatantia. Coepimus et lapide pingere). For incrustation applied in gypseous stone on a rough core, cf. the Hellenistic Citadel and Redoubt palaces at Dura-Europos in Syria, Excavations at Dura-Europos, second season, pl. XXXI, 2, and fourth season, p. 22.

The structural style, therefore, shows the following types: the zone (Hellenic and early Hellenistic); the imitative painted and actual plastic incrustation (Hellenistic); the perspective incrustation (late Hellenistic) and the ornamental incrustation (Imperial). For the ornamental incrustation style, Pagenstecher, Sitzb. d. Heid. Ak. Ph. Hist. Klasse, 1917, pp. 21 ff.; Wirth, Römische Wandmalerei,

Berlin, 1934, pp. 25 ff.

<sup>2</sup> For the influence of the column, L. Curtius, *Die Wandmalerei Pompejis*, Leipzig, 1929, pp. 77 ff.; for the use of vaulted ceilings, Vitruvius, VII, II, and A. W. Van Buren, *J.R.S.* 14, 1924, pp. 112 ff. 
<sup>2</sup> Cf. on the exterior, the use of pilasters in the façades of the Tufa houses in Pompeii. For the photographic illustrations I am much indebted to Mrs. T. Warscher of the German Institute in Rome, with the exception of pl. XLIV, 2, fig. 2b, and fig. 3; for the drawings, to the collaboration of Mr. E. J. Schruers of the Harvard School of Architecture. The illustrations from the Villa Item (pl. XLV, 2, 3; XLVI, 1, 2) are based on Maiuri's splendid publication, *La Villa dei Misteri*, Rome, 1931; pl. XLV, 5, 6 on Mau's *Atlas*, pls. 3 and 4; pl. XLV, 7 on Anderson photo 26435; pl. XLV, 8 on Niccolini, *Case di Pompeii*, IV, 2, pl. XIII; pl. XLVI, 6 on F. Barnabei, *La Villa Pompeiana di P. Fannio Sinistore*, Rome, 1901, pl. IX, fig. 18; the remainder on my own photographs.

tural blocks. Without its extension over the wall, a clumsy protrusion was unavoidable in large high rooms (cf. Pl. XLIII, 2, 3). Columnar elaboration in stucco, however, was not attempted in living-rooms except on a small scale<sup>1</sup> (cf. Pl. XLIV, 4). Perspective painting presented a happier solution (cf. Pls. XLV-VI). By the use of a recessive base line and socle the illusion of painting removed the structural wall two planes from the floor mosaic.<sup>2</sup> It permitted a freer use of columnar effects, a resultant perspective reduction in the size of the structural element and a compensatory suggestion of the third dimension. It thus paved the way for a lower ceiling. But in proportion as the ceiling was lowered, further compensation was sought on the side walls. It became necessary to get rid of the structural wall.

To dispense with the structural wall, two methods were used. Either the tridimensional idea was carried to its logical dénouement in the piecemeal breakdown of the wall (cf. Pl. XLVI, 1–6), or, by an alternative method, the wall was retained but ceased to be structural (cf. Pl. XLVI, 7). It became instead a field for flat pictorial ornament. To fill the vacuum created by the one method, a repertoire of exterior scenes from the contemporary stage was available (cf. Pl. XLVI, 4, 5, 6); for the other, that wide range of color for pattern effect so deplored by Vitruvius.<sup>3</sup>

The result of the painted illusion is to open up such a range of decorative possibilities that the evolving style in its painted form has the air of a ready-made system. The style does, indeed, create a system of its own, but it cannot be lifted from its context. This is, in the last analysis, nothing short of the complete Italic house. Within the house the individual wall is only part of a larger whole, the "decor" of the individual room, in the subdivisions of which, mosaicist, painter and stuccoist worked together for a unified decorative effect 4 (cf. Pl. XLV, 7). Further, there survive among the Pompeian houses a sufficient number wholly decorated in the style to show that the individual room itself can form part of a conclave or suite of rooms; the suite, in its turn, part of a group of such designed to cover the living quarters. In other words, the treatments of wall, room, suite and house are interrelated and build up a system of decoration both logical and complete.

In the plastic form of the style the chief difficulty in development lay in the intractable nature of the material. This, though suitable for a small house, remained the chief obstacle to the spatial effects of a growing architecture.

<sup>&</sup>lt;sup>1</sup> See p. 365, note 1.

<sup>&</sup>lt;sup>2</sup> The base line is emphasized in the drawings in wash to distinguish it from the socle and the mosaic. <sup>3</sup> For the theatrical connections of the perspective style, Vitruvius, VII, V, 2; cf. V, VI, 9; E. R.

Fiechter, Die baugeschicht. Entwicklung d. ant. Theaters, Munich, 1914, pp. 102 ff.; A. Frickenhaus, Die altgriechische Bühne, Strassburg, 1917, p. 48. pl. I; Rostovtzeff, loc. cit., p. 150; Pfuhl, op. cit., pp. 868 ff.; H. Bulle, Abhand. d. Bayer. Ak. Ph.-Hist. Kl., XXXIII, 1928, pp. 273 ff.; cf. von Gerkan, Das Theater von Priene, Munich, 1921, pp. 113 ff., and Curtius, op. cit., pp. 122 ff. and 135 ff. This question will be treated in a separate paper entitled, Scaenographia.

For the use of color, Vitruvius, VII, V, 7. In pl. XLVI, 7, the central columns are replaced by thin candelabra (cf. pl. XLV, 8); the wall presents a variety of color—black socle, purple ledge, red orthostates in green frame, a yellow fascia, and alternate patterns of purple on a white ground or white on green at the top of the wall.

<sup>&</sup>lt;sup>4</sup> Vitruvius, VII, IV, 4 and 5 ff. Chap. IV, 4 serves as introduction to the famous passage, but is not generally quoted. For the importance of mosaic and ceiling in decor, cf. chaps. I and II.

<sup>&</sup>lt;sup>5</sup> Vitruvius, VII, V; cf. Paul. ex Fest., p. 39, 9 (Müller): conclavia dicuntur loca, quae una clave clauduntur. See below, p. 363, note 4.

For an interior system, the style is conditioned by its own unsuitability; each of its resultant developments tends to minimize its structural content. In its Pompeian forms it coincides with the spread and supersession of Hellenistic architecture; the ultimate stage of this Hellenistic chapter is the preparation for Mau's third style, the ornamental Imperial.<sup>1</sup>

# THE ARCHITECTURAL SETTING: THE PERISTYLE HOUSE

As has already been noted, concomitant with the appearance of the style is the use of column and peristyle effects in the Italic interior. With this trend, the history of the style is closely knit. Together with stone incrustation on the exterior of the house, the low Corinthian type of peristyle appears instead of the pillarless Tuscan cavum aedium (cf. Pl. XLIII, 1). But this form, borrowed from the Greek house, had no future in the Italic during a period of expansion. In the House of Pansa the experiment was tried of placing it on the axial plan of the house in a second court, but as a general rule, the peristyle was set in the garden athwart the house and the rooms surrounding it became the center of household activity.<sup>2</sup>

Conversely, the atrium began to lose in importance. It became more and more an ornamental subdivided antechamber, half room, half court in front of the new living quarters.<sup>3</sup> This process was gradual. At first the main entertaining rooms were grouped around the old focal point, the tablinum (Houses of Sallust, Epidius Rufus, the Faun: cf. Pl. XLIII, 2, 3). In these houses the tablinum wall is only partially broken down, giving an orientation on the atrium. In the House by the Porta Marina (Reg. VII, Ins. Occid., 13), in those of the Silver Wedding and Obellius Firmus, the process of breaking down the wall is complete and the tablinum gives on both atrium and peristyle.

Meanwhile spatial effects both vertical and tridimensional multiplied as the shift to the peristyle continued. Either the alae were made bigger than the adjoining rooms (Sallust and Pansa), or they were placed in the center of the sides (Porta Marina, Epidius Rufus, the Faun). Windows were cut in their sides (Sallust, the Faun) or in the sides of the tablinum (Porta Marina, the Faun). Concurrently, the tetrastyle atrium was introduced, to meet a wider overhang of the eaves in such houses as those of the Faun, the Silver Wedding, and Obellius Firmus.

The creation of peristyles resulted in an increase in the number of living-rooms and in their enlarged proportions. While the reception rooms of the original Italic houses must have been limited to tablinum and alae, and those of the plastic style form an extension round the tablinum, those of the painted group form a series in the peristyle. In the new entertaining rooms there appears a tendency to group rooms together in well defined suites, each consisting of a major room and adjoining cubiculum or cubicula.<sup>4</sup>

See A. Ippel, Der dritte pompeianische Stil, Berlin, 1910. The ornamental trend evolving together with the structural is treated in my (unpublished) doctoral dissertation, Yale University, 1933.

<sup>&</sup>lt;sup>2</sup> For the ground plan of the houses cited, see C.I.L. IV, Suppl. 2, the plan of Pompeii.

<sup>&</sup>lt;sup>3</sup> For recent discussions of the evolution of the atrium: Maiuri, Atti I<sup>o</sup> Congresso Nazionale di Studi Romani, 1929, p. 161; R. C. Carrington, Antiquity, 7, 1933, pp. 133 ff.; Boethius, loc. cit., p. 161.

<sup>&</sup>lt;sup>4</sup> The disposition of suites is seen at its best in the Villa Item (Maiuri, op. cit., pp. 37 ff., pl. A). The periphery of the house is divided into three suites, each consisting of double cubiculum with clothes

Within the suite the column is employed in oeci reminiscent of the atrium forms, in the Corinthian and the tetrastyle types (cf. Pls. XLV, 7; XLVI, 5). These reception rooms, unlike the atrium, are roofed by a vaulted ceiling.

# THE PLASTIC STYLE: SIMPLE FORMS AND COLUMNAR EXPERIMENT

The main categories of plastic interior wall are simple and columnar. The simple wall in the living-room (cf. Pl. XLIII, 2) shows a distribution into four fields of podium socle, orthostates, cornice area, and frieze. Within these fields considerable latitude is allowed in treatment. The frieze may be left smooth, may be opened up by narrow windows or filled with blocks (cf. Pl. XLIII, 2). The orthostate area may show horizontal or vertical blocks or a rare combination of both (cf. Pl. XLIII, 2, 3, 4). The socle may be left smooth or treated structurally (cf. Pls. XLIII, 2; XLIV, 1, 4). The most variable area is that of the cornice.

The effective note in the wall is given by the orthostates. Horizontal blocks in this position are better suited for small rooms; vertical, for rooms of medium size; in their

enlarged forms, both are clumsy. The combination is purely decorative.<sup>2</sup>

The columnar wall shows a coördinated type in which the semi-engaged column or pilaster marks the join of treatments in a subdivided room (cf. Pl. XLIII, 2, 3; Fig. 2b). It also shows a systematic type with several variations (cf. Pl. XLIV). In this type of wall a columnar system stands in front of a given area. In proportion to the amount of wall covered, it may be complete or partial. It is generally a single system, but a double form (cf. Pl. XLIV, 2) and a combined (cf. Pl. XLIV, 3) are found. The double system encloses behind its outer row of columns an inner row; the combined superimposes a row of small columns on top of the lower system. The single partial systems are found in small living-rooms, the other forms in peristyles.

Behind the complete system illustrated in Plate XLIV, 1, the horizontal blocks form

closet and triclinium (Suite I, room 16 and 11–14; Suite II, rooms 4 and 5; Suite III, rooms 8 and 6). Off the atrium open a formal quadrate room and a cubiculum diurnum, perhaps for official business. Cf. the plans of the House of the Labyrinth, Mau, op. cit., p. 81 and of the Boscoreale villa, Barnabei, op. cit., pl. II; for the cubicula, O. Elia, Historia, 6, 1932, pp. 394 ff. A fragmentary suite is found in the upper section of the Homeric House (Reg. I, 6, 4) in the New Excavations, and in the peristyle of the House of Obellius Firmus. Scenographic and megalographic treatment emphasized the importance of their triclinia. See below, p. 370, for the scenographic. Three examples of the megalographic remain in the well-known Villa Item and Boscoreale triclinia and in the triclinium quoted in Reg. I, 6, 4 (Not. Scav. 1913, p. 356; 1933, pp. 252 ff.). In these, a religious note (Vitruvius, VII, V, 2) dominated the central wall; in the first, Bacchus; in the second, Venus, Bacchus, the Graces; in the last, possibly Venus Urania. Cf. Rostovtzeff, Mystic Italy, New York, 1928, pp. 167–8, also the female figure on the central wall seated beside the sphere.

<sup>1</sup> For windows in the frieze, Mau, Pompeji in Leben und Kunst, Leipzig, 1900, fig. 122 (the House of the Centaur); for blocks, Wandmalerei, pp. 62-63 ff. (Reg. I, 2, 16); for structural treatment of the

socle, p. 26 (the House of Sallust).

The ornamental cornice area comprises the cornice with one, two or three rows of blocks below it (Mau, pp. 48-9, in the House of the Faun, room 32; pl. I, 2; Mau, p. 63g in Reg. I, 2, 16). Where the vertical orthostate is used, the cornice may follow directly above it as in Reg. VI, 10, 6 (Mau, p. 78).

<sup>2</sup> The example of combination illustrated occurs on the side walls of the open exedra between peristyles in the House of the Faun.

On either side of the dividing wall between Reg. VII, 4, 57 and 59.

<sup>4</sup> With the possible exception of the partial socle system in Reg. VI, 2, 26. Mau, p. 70, describes this wall as belonging to the garden. For the distribution of the partial types, see the following note.

a sharp contrast to the vertical drive of the pilasters. In the garden wall from Reg. IX, 3, 2, illustrated in Plate 2 of Mau's Atlas, a vertical note is struck also by the orthostates.

The partial system shows three forms. It either occupies the frieze, as in the well-known example from the House of Sallust, extends to the socle supporting an architrave at the join with the ceiling, or reaches to the ground from below the frieze area (cf. Pl. XLIV, 4, 2).

It will have been noted that while experimental forms occur with greater frequency in the peristyle, in the living-room, the columnar system is limited to partial effect. There was, however, great need for its application in large rooms. Compare the treatment of the tablinum in the House of the Faun with that of the adjoining room (cf. Pl. XLIII, 3). The tablinum wall, broken down on all sides by vertical and horizontal openings, left narrow corners for a harmonious vertical application; in the rear room, vertical treatment was also applied to the high wall, but resulted only in an exaggeration of size and protrusion in all the subdivisions of the decoration. To minimize this awkwardness, it would have been possible to apply a partial or even a complete system to the wall. But even though the creation of a framework would have permitted a reduction in the size of the subdivisions, this would not have reduced the protrusion of the wall; it would only have accentuated it.

If, then, there were definite limits to stucco application, another method was still possible, namely the painted form of the style without spatial effect, such as is found in the François tomb at Vulci.² It is, however, significant of the spatial trend that, while painting was used in the House of the Faun, recession was sought at the same time. It is significant also that the experiment was made in forms which take up the task where plastic experiment had left it. The painted style extends the range of columnar effect.

## THE PAINTED STYLE: SPATIAL DEVELOPMENT AND STANDARD FORMS

An early application of the painted style is found in two rooms in the House of the Faun, Nos. 28 and 43 in Mau's plan.<sup>3</sup> The painting has deteriorated much since Mau saw it, but the main features of the structure can be filled out by comparing Mau's detailed description and Figures 1a, b; 2a. Of room 43, an oblong triclinium, Mau writes (p. 263; cf. p. 37-9):

"Zimmer (43) südl. am 2. Peristyl: Marmorbekleidung mit Säulen. Am Boden ein gelber, dann ein violetter Streif. Sockel: gelber Ablauf; hell-marmorirte Platten (gelb-grün-violett) mit Fugenschnitt; gelber Karnies mit röthlicher Oberfläche; grüner Streif; grosse gelbe stehende Rechtecke (Fugenschnitt: violette Linien ohne Unterscheidung von Licht und Schatten) wechselnd mit schmalen, gelb und röthlich marmorirten (Fugenschnitt ebenso); monochrom in Gelb gemalter Mäander; eine Reihe hell (grün-violett-gelb) marmorirter liegender Rechtecke mit gelbem Rand, wechselnd mit kleinen violetten, auf denen, wenigstens zum Theil in Gelb, Figuren gemalt sind. Dann folgt über einem schwarzen

For the frieze system, Reg. VI, 2, 4, Mau, Atlas, pl. I, b, c, d, g, k, text, p. 32; also Reg. VI, 15, 9. For the socle system, Reg. VI, 9, 5, pp. 75–6, Reg. VI, 2, 26, p. 70. For interior columnar effects in Italy and Sicily, V. Macchioro, Apulia, II, 1911, p. 159; Rostovtzeff, Neapolis, I, p. 3; G. de Petra, Mon. Ant. VIII, 1898, pp. 217–232, pls. V–VII; P. Orsi, Mon. Ant. XVII, 1907, p. 384, figs. 284–287, pl. XLVII; E. Gabrici, Mon. Ant. XX, 1910, p. 22, fig. 10. In the Sullan period, R. Delbrück, Hellenistische Banten in Latium, Strassburg, 1907, I, pp. 67 ff., pls. XII–XIX; for spatial effect, ibid., II, pp. 128 ff.; cf. 169 ff., pl. I.

<sup>2</sup> See p. 360, note 5.



Fig. 1a. Room 43. House of the Faun



Fig. 1B. Room 28. House of the Faun



Fig. 2a. Room 28. Detail



Fig. 2B. Reg. VI, 13, 9

Strich das durch die Säulen in Stücke zerschnittene Gesims: s. S. 154; eine Reihe gelber liegender Rechtecke, wechselnd mit kleineren derselben Farbe; auf letzteren monochrom je eine Maske; an eben diesen sind die vor diesem Theil der Wand hängenden Ghirlanden befestigt. Endlich über einer cassettirten Decke das Epistyl der Säulen, welches mit seinem oberen Rande aus der Wand vorspringt. Der Decorateur wollte, so sollte man meinen, hiermit andeuten, dass dies Glied nicht mehr, wie die bisherigen, als weiter zurück, sondern als in der wirklichen Wandfläche liegend zu denken sei. Doch ist es nicht so. Es folgt ein Fries unkenntlicher Farbe, ein gemaltes Gesims, ein breiter grüner Streif, und endlich nochmals eine Cassettendecke, welche eben zeigt, dass alles unter ihr liegende immer noch als weiter zurück liegend zu denken ist und wir jetzt erst an der wirklichen Wandfläche angelangt sind.— Die gelbe Farbe herrscht in dieser Decoration so sehr vor, dass sich dieselbe ihrem Gesammteindruck nach von einer monochromen nicht sehr unterscheidet. Die korinthischen Säulen sind auf eigens eingeputztem Stuck gemalt."

The wall was, accordingly, given a recessive base line (am Boden ein gelber, dann ein violetter Streif), and a partial systematic treatment above the socle. This system supported an architrave with a cornice, and the recession of the base line was reconciled by recessed panelling (Cassettendecke), with the limits of the roof. Mau's difficulty is explained by his failure to reckon with this recessive base line.

The treatment of room 28, a square cubiculum, is described as follows:

"Ueber die Spuren einer Decoration ersten Stils s. S. 38. Auf der l. Wand ist das erste Stück, welches von der Thür, wenn sie geöffnet war, bedeckt wurde, einfach hell marmorirt. Sonst ist von der sorgfältig ausgeführten Decoration nicht viel erhalten; den Mittelpunkt bildet eine, wie es scheint, sehr ausführlich gemalte Thür; zuoberst (im ganzen Zimmer) ein in Stuck gearbeitetes Zahnschnittgesims mit Fries und Epistyl. Die Rückwand wird fast ganz von einer grossen gemalten Nische eingenommen. Die Hinterwand derselben erscheint mit Marmor bekleidet und oben durch Epistyl, violetten Fries und Zahnschnittgesims abgeschlossen; in der Lünette sind Vögel, unter der Wölbung Cassetten gemalt. Der Sockel stellt einen an einem Strick aufgehängten Teppich dar. Die rechte Wand stimmte mit der Rückwand überein. Eingangswand (nur r.v.d. Thür): Marmorbekleidung über einem eben solchen Sockel."

The following details may be added. The stucco cornice enclosed a frieze of small blocks, as in the plastic style. Within the niche of the central wall the structure was treated in miniature (cf. Pl. XLV, 1, and Figs. 1b, 2a). Vertical orthostates rise above a horizontal row of blocks. Above the cornice area in the center of the wall the frieze is opened up in a series of three [?] small arches, cutting across the line of the cornice, which runs around the whole room. Between two masks, one resting on the cornice of the niche wall, the other against it, hangs down an indistinct section of a garland across the orthostates.<sup>2</sup> This room, therefore, presents a recession coördinated by pilasters, as in the plastic subdivided room (cf. Fig. 2b). It foreshadows the double cubiculum of the Villa Item, begins the breakdown of the wall beneath the arch in the frieze area and is also the first example of the miniature style.<sup>3</sup> It illustrates well the advantages of the new technique. Beneath the cornice level of the plastic style

<sup>1</sup> Except where the columns or altars stood on the base line, as in Reg. VII, Ins. Occid. 13 (Wandmalerei, p. 149), Mau misinterpreted it as "ein bedeutungloses Trennungsglied."

<sup>2</sup> Incorrectly restored with columnar system in pl. XLV, 1. This very tentative sketch indicates the main features of the structure. The blank sections of the wall cannot be restored without further study. The fragmentary curtain socle at right and left of the wall has been restored with the pattern of the better preserved example in room 31 across the atrium.

<sup>3</sup> For the miniaturistic style, cf. the Villa Item (Maiuri, figs. 70, 72) and the House of the Labyrinth (Reg. VI, 11, 10, room 42), pl. XLVI, 4.

which preceded it, it was possible to suggest the loftiness without the close confinement of the plastic room. In the perspective recession of the niche it was possible still further to reduce the scale of the structural blocks.

Thus two types of columnar effect are represented in these two rooms, the coördinated wall and the partial systematic in its socle application. What, then, are the

basic types of early painted wall? (Cf. Pl. XLV).

Structurally, they are repetitions of the plastic, of the simple and the columnar, coördinated and systematic. The simple wall repeats the four divisions of the plastic. The smooth socle is rarer, the vertical orthostates replace the horizontal. The ornamental area of the cornice now generally consists of either one or two rows of horizontal blocks and the members of the cornice; the frieze retains the rows of small blocks. Coördination continues in both atrium and living-room, at first by means of plastic pilasters, though these are gradually supplanted in the living-room by painted pillars. Of the systematic types are found: the partial, in socle and ground types; the complete, in single, double and combined (cf. Pl. XLV, 3–5; XLVI, 2).

The first period of painting is marked by an excess of structural experiment in lofty rooms. This movement has its climax in the Villa Item, from which two illustrations, the winter triclinium and room 16 will serve. In the first (cf. Pls. XLV, 4; XLVI, 1) a partial system reaching to the ground was applied in the anteroom, a complete system of plinth columns to the side walls of the inner room, an elaborate door to the central wall. This produced a variety of recession. There was base line and socle recession throughout the room; in the anteroom a breakthrough above the cornice of the structural wall: in the inner room above the cornice at a higher level; on the central wall an intensification above the door. But there was also a differentiation of half planes. The pillars of the anteroom stand half a plane behind the plinth columns; the exterior columns of the central wall project half a plane in front of the columns flanking the door.

In room 16 (cf. Pl. XLVI, 2) there is base line and socle recession, recession behind the cornice of the structural wall, recession behind that to the tholos vista and a

similar variety in the recession of the other niche.4

These experimental forms were followed by a move toward standardization and greater simplicity. This movement is dependent on three achievements: first, uniformity of recession in the wall; secondly, a satisfactory balance of vertical and horizontal emphasis; thirdly, a simple and obvious method of reconciling the recession where it joins the ceiling. This process was materially advanced by the gradual lowering of the ceiling made possible by the barrel vault (cf. Pls. XLV, 7; XLVI, 5).

are specified, and p. 174, where they are not, although they exist.

<sup>&</sup>lt;sup>1</sup> Mau, Atlas, pl. 4a. In the Villa Item the tradition of plastic pilasters survives in Rooms 4 and 8 (Maiuri, p. 183, for room 8). In these a plastic pilaster between the bed niches was matched by a painted fellow on the opposite wall.

<sup>2</sup> For a combined system in rooms 3 and 4 of the Villa Item, see Maiuri, p. 182, where the columns

<sup>&</sup>lt;sup>3</sup> The socle and base line in this room were repainted and are restored in the plate. For the partial system of the anteroom, cf. Maiuri, fig. 80, which shows the continuation of the pillars in front of the socle.

<sup>&</sup>lt;sup>4</sup> Maiuri, figs. 73-74 (Alcove B), figs. 71-72 (Alcove A). The complication of recession led to structural inaccuracy. The arched architrave of the interior columns projects beyond that of the pillars in front of them.

The first step was the elimination of any structural overhang in the architrave of the columnar systems (cf. Pl. XLV, 4, 5). One common architrave sufficed now for the whole room. Instead of two sets of recessed panelling to reconcile frieze, socle and base line recession, one was indicated beneath the architrave of the columns projecting on the base line. The next step (cf. Pl. XLV, 6) was to draw back these columns from their projection into the line of the socle. This resulted in a balance of vertical and horizontal. By the elimination of the overhang, the intercolumniations gained in verticality; for the loss of verticality caused by the elimination of the plinth, compensation was given in an added horizontal emphasis in the wall.

What was, however, the spatial result? If it was possible to open up a third plane where the overhang had been and extend it at one level along the wall, the base line had yet to be reconciled. For this a solution was used which may be termed the Schema (cf. Pls. XLV, 7, 8; XLVI, 6). Pillars standing on the baseline were placed at the four corners of the room, at the join of wall with wall and in a subdivided room at the join of subdivisions; recession was confined behind the level of their architrave. This amounts to a systematic form of coördination. It shows three forms: one for the large subdivided room, the triclinium; one for the small subdivided room, the cubiculum; one for the square room, large or small, a quadrate treatment.

Plate XLV, 7 illustrates the triclinium form. The subdivisions of the mosaic, painting and ceiling are coördinated by pillars in the four corners and below the arch. No columns stand on the socle, but the vertical note is rendered sufficiently clear by the repeated upright blocks in the reduced area of painting. In the quadrate room, the framework of the schema encloses two columns or pillars on the socle in front of each structural wall (cf. Pl. XLV, 8). In the cubiculum, the pillar grouping is the reverse of that in the triclinium (cf. Pl. XLVI, 6). Where the wall is unbroken, the intermediate columns are generally omitted except on the central wall. Where, however, the wall is broken down, they help to preserve a vertical note also on the side wall where they coördinate the stretches of vista.

#### THE BREAKDOWN OF THE WALL

Within the vertical framework, thus reduced and standardized, the complete breakdown of the wall was hastened (cf. Pl. XLVI, 1–6). This movement dates, as we have seen, from the first painted walls of the House of the Faun. Beginning in the frieze area, where in the plastic style windows were inserted, it was greatly assisted by the analogy of spatial suggestion in scene painting.

In the lofty walls of the Villa Item several experimental forms occur. Of particular interest again are the winter triclinium and room 16. In the triclinium the breakdown is graded in stepped zones, beginning above the central door and moving outwards to the entrance (cf. Pls. XLV, 4; XLVI, 1). In room 16 the section above the columns is opened up in both niches, by arches in alcove A; in alcove B behind the arched architrave of the partial system. In the latter, the opening under the arch is enlarged to include also the central frieze section of the structural wall. To fill the

<sup>2</sup> Cf. the cubiculum in the House of Trebius Valens, illustrated in Curtius, op. cit., fig. 50.

<sup>&</sup>lt;sup>1</sup> The socle in this room has been repainted and is restored together with the lower section of the pillars.

vacuum, a tholos vista is used (cf. Pl. XLVI, 2, and Maiuri, op. cit. Figs. 71-74).

A variant opening, this time attacking the socle, is found in the cubiculum of the Labyrinth House (cf. Pl. XLVI, 3). Here are effect of contrast is obtained between the

Labyrinth House (cf. Pl. XLVI, 3). Here an effect of contrast is obtained between the peristyle vista at the top of the anteroom wall and the series of arches in the socle of the niche. In the Corinthian oecus of the same house a wider section is released for vista on all three sides in a wall surface reduced by the arched ceiling resting on the columns (cf. Pl. XLVI, 5). On both side walls the tholos vista is repeated; on the center wall appears the street vista found also in the Boscoreale cubiculum (cf. Pl. XLVI, 6). The same method is applied in miniature to the walls of the adjoining cubiculum of the Labyrinth mosaic (cf. Pl. XLVI, 4 and Fig. 3).



Fig. 3.—Reg. VI, 11, 10, Room 42

At the same time, this cubiculum furnishes possibly new evidence for a theatrical origin of these standard fillings. To each of the three walls in this open room the same treatment is applied; only on the west wall, however, does the upper section survive. Instead of the tholos vista, a recessed court vista similar to that of the Boscoreale winter triclinium fills the center. This consists of a grouping between two pillars of two smooth-sided Ionic plinth columns with architrave adorned with

griffins supporting a central pediment. The middle pair, wreathed with ivy trails, flank a spiked fence, in front of which stands an altar. To left and right project two wings. The face of the left wing is occupied by a door set between pillars, of which the left only is visible. From this pillar projects a low screen or wall on which rests an indistinct mask. In front of these wings are seen portions of two male figures of equal height. On the left, the better preserved portion, is of a grey-bearded man, raising in both hands a club. He is mounted on the prow of a ship whose sides arising from a molded base show a scroll pattern and are limited by a band terminating in a Medusa head. Only the right arm of the right figure is preserved. This grasps the end of a conch, raised presumably to the mouth of the holder. These figures are those of Tritons. Are they the  $\theta \omega i \theta a \lambda \acute{a} \sigma \sigma \omega i$  of Pollux?

In the Boscoreale cubiculum the unification of these two types on the side walls permits the inclusion of a third type of vista on the central wall, the satyric, whose landscape effect is far removed indeed from the original structural filling (cf. Pl. XLVI, 6).

To break down the socle also was the last move in the destructive process. This was carried out in the Villa of Livia at Prima Porta. Here the aim of the style was fully realized.<sup>2</sup> Beneath an arched ceiling which covers the whole room, the spectator gazes on all sides into the depths of a garden. Into the living-room has found entrance at last the free air and sunshine of the peristyle.

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<sup>1</sup> Pollux, Onomasticon, IV, 126. In addition to the examples quoted, the theatrical setting occurs in Pompeii, twice in the Villa of Diomede (Mau, Atlas, pl. 7b; the other example is in a much damaged occus overlooking the garden), in the tablinum of the House of Popidius Priscus, in the cubiculum of Reg. I, 6, 4, in the two rooms adjoining the Triclinium of the Cryptoporticus, (in modified form) in the triclinium of the House of Obellius Firmus, and the House of Livia on the Palatine (Mon. dell' Inst. XI, pl. XXII).

<sup>2</sup> Antike Denkmäler, I, pl. 11 and p. 4, pl. 24 and p. 11, pl. 60, and p. 52; H. Sulze, Röm. Mitt. XLVII, 1932, pp. 176 ff.; E. Strong, C.A.H. X, 1934, p. 566.

# THE INSCRIPTION ON A BYZANTINE KETTLE FROM CORINTH

IN AN article entitled "Bronze Objects from Old Corinth, Greece," in Volume XXXIX, No. 1 of this Journal, Mr. Frederick O. Waagé publishes a bronze kettle of the Byzantine period (pp. 88, 90, and Figs. 7 and 8). After a careful examination of the object in question, I feel obliged to take exception to his statement on p. 88, that "the corrosion of the surface has deprived us, unfortunately, of the full text of the inscription." Although the letters are faint, enough remains to determine the shape of almost every one and most of the inscription is legible. The appended facsimile by Joseph M. Shelley shows that only at the beginning and end of one side of the vessel is the surface too much corroded to give a definite reading (Fig. 1). The inscription, as now restored, is as follows:



FIG. 1.—INSCRIBED BAND ON KETTLE

 $K(i\rho\iota)\epsilon$ , βοή $\theta(\epsilon)\iota$  τοῦ δούλου σου Ἡση[δ]όρου ἄμα τ $(\hat{\eta})\iota$  συμβήου Ἡρ $[\epsilon]\tau[\hat{\eta}]$ 

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<sup>1</sup> Cf. συρθήου in Gregoire, Recueil des inscriptions grecques et chrétiennes d'Asie Mineure, no. 338, p. 122 (I owe this reference to Prof. D. M. Robinson).

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AMERICAN SCHOOL OF CLASSICAL STUDIES AT ATHENS

# ANOTHER ZENON PAPYRUS AT THE UNIVERSITY OF WISCONSIN

INVENTORY No. 1 of the Wisconsin Papyri, an account of farm work and payment for it, dated 255–254 B.C., has been identified as one of the Zenon documents and published in the *Journal of Egyptian Archaeology*<sup>1</sup> by Professors W. L. Westermann and A. G. Laird.<sup>2</sup> Professor Laird has very generously granted me permission to publish P. Wis., inventory No. 2.

P. Wis. 2 is part of a report on a herd of goats (Fig. 1). The upper edge of the papyrus



Fig. 1.—Recto of P. Wisc. 2

is torn and l. 1 is written close under it. The beginning of the verso is also written along the upper edge and by its position as well as its content indicates that a preceding portion has been lost. The writing is Ptolemaic, belonging to the earlier part of the period. The 36th year, mentioned in l. 17, dates the papyrus to the reign of Ptolemy Philadelpheus. Its connection with the Zenon group was readily perceived from the names which occur, and Mrs. Hasenoehrl placed it exactly by pointing out that it is the bottom of P. Cairo Zenon III, 59328.3 Comparison with a photograph, which was kindly supplied by the Department of Antiquities of the Cairo Museum, revealed

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<sup>1</sup> IX, pp. 81-90.

<sup>&</sup>lt;sup>2</sup> I wish to acknowledge Professor Laird's helpful advice and suggestions in the transcription of the papyrus. I am also greatly indebted to Mrs. Elizabeth Sayre Hasenoehrl, Assistant Curator of Papyri at Columbia University, for assistance in the preparation of this article.

<sup>&</sup>lt;sup>3</sup> In citing references the usual abbreviations are adopted. Roman numerals denote volumes. P. Cairo Zenon—Catalogue général des Antiquités Égyptiennes du Musée du Caire: Zenon Papyri, by C. C. Edgar, Cairo, 1923–1931.

P. Hib. - Grenfell and Hunt, Hibeh Papyri, London, 1906.

P. Mich. Zenon-C. C. Edgar, Zenon Papyri in the University of Michigan Collection, Univ. of Mich. Press, 1931.

P. S. I. - Papiri della Società Italiana, edited by G. Vitelli and others, Florence, 1912-1932.

that the handwriting of the recto and verso of P. Wis. 2 is identical with the handwriting of the recto and the second hand of the verso respectively of the Cairo papyrus. The latter is broken horizontally and the height of the upper part is slightly less than one-half the height of the lower or approximately  $8\frac{1}{2}$  centimeters. The height of P. Wis. 2 is 9 centimeters.

P. Wis. Inventory No. 2 From Philadelphia in the Fayûm .09 m. x .30 m.

|            | Date FebMar., 248 B.                                   | 0   |
|------------|--|-----|
| Rec        |  | ,C. |
| Top        | βι α 'Αθηναγ[όραι] α                                   |     |
|            | τυροί δ  |     |
|            | β 'Αθηναγόραι α τυροί δ                                |     |
|            | γ 'Αθηναγόραι α τυροί δ                                |     |
| 5          | δ 'Αθηναγόραι α τυροί δ                                |     |
|            | ε 'Αθηναγόραι α τυροί δ                                |     |
|            | οὖτοι δέδοντ[αι δ]ιὰ                                   |     |
|            | Λιμναίου.  |     |
|            | Column II  |     |
|            |  |     |
|            | Καλλίπ[πωι δι' ἐπισ-                                   |     |
| 10         | τολής ξρ[ιφ]ος δν                                      |     |
|            | έλαβεν Λιμναΐος  |     |
|            | δ άδελ[φ]òs a  |     |
|            | ιε Κριτολάωι διά 'Αντι-                                |     |
|            | πάτρου ἔριφ[ο]s α                                      |     |
|            | Column III   |     |
| 15         | καὶ ἀνηλίσ[κ]ετ[α]ι ὀψώνια                             |     |
|            | της έπιγονης των ρμ                                    |     |
|            | τοῦ ελ (ἔτουε), Ἐπεὶφ καὶ Μεσορή,                      |     |
|            | τοῦ μηνὸς (δραχμαί) γ (τριώβολον), (γίνονται) (δραχμαί | ) } |
| (2nd hand) | ) ρξβ  |     |
| 50         | λ  |     |
|            | Verso  |     |
| (0-111)    |  |     |
| (2nd hand) |  |     |
|            | άπὸ τούτων   |     |
|            | Σωστράτωι έριφ[οι] β                                   |     |
| 2.5        | λοι (πούς) Νίκανδρος έχει σιβ                          |     |
| 25         | άπὸ τούτων   |     |

' Ασκληπιάδει ιε Φιλίνωι ε έχει δε α είς πρασιν ροβ καὶ ων ελάττω Φιλίνωι 30 εδωκεν δ (γίνονται) ρος

### TRANSLATION

Tybi 1-5. To Athenagoras 1 (kid), 4 cheeses. These have been given through Limnaios.

To Kallippos, on receipt of a letter, a kid which the brother Limnaios took -1. 15 To Kritolaos through Antipatros -a kid -1

And there is spent for wages (for the care) of the young of the 140 (goats) for Epeiph and Mesore of the 36th year, each month, 3 drachmae, 3 obols, total 7 drachmae.

162 30

Verso

From these
To Sostratos – kids – 2
Nikandros has left 212
From these
To Asclepiades 15
To Philinos 5 He has 1
For sale 192

And the deduction upon those which he gave to Philinos 4
Total 196

#### NOTES

The date is taken from the docket of P. Cairo Zenon III, 59328,  $(\xi\tau ovs)$   $\lambda \zeta' \tau \hat{v} \beta \iota$ . Hermias reports for the 36th year. The days which are named fall between Pauni 15 (l. 2) and Phamenoth 21 (l. 91). Hermias' contract probably ran from Pauni through the following Pachons. A similar rental year is found in P. Mich. Zenon 66, 8 f.; 67, 3. But if Hermias delivered his statement in Pauni of the year 37, it is strange that it was not dated until Tybi, 7 months later. A possible explanation is that the verso of the papyrus was written at the end of the financial year, when a summary was made of the rent received and the goats leased during the year.

L. 9 ἐπισ]τολῆς
 Cf. P. Mich. Zenon 67, 27.δι' ἐπιστολῆς. An alternative reading is ἐν]τολῆς.
 Cf. P. Cairo Zenon IV, 59622, 3. αὐτῶι δι' ἐντ[ολῆς.
 L. 17 ςλ
 The reversion of ςλ for λς is not uncommon. Cf. P. Cairo Zenon IV, 59772, 8:

τοῦ ςλ (ἔτους); P. S. I. IV, 372, 23: (ἔτους) ςλ; P. Hib. 104, 3: βκ (ἔτους).

Ll. 19, 20

The numbers are written in the hand of the verso a short interval below the state of the verso and verso a

The numbers are written in the hand of the verso a short interval below the 3rd column. The 162 undoubtedly refers to the 162 of P. Cairo Zenon III, 59328, 23. The 30, if correctly read, probably refers to P. Cairo Zenon III, 59328, 133. Perhaps the transcription should be  $\alpha(l\gamma\epsilon_5)$  instead of  $\lambda$ .

L. 24 οι = λοι (πούς)

Cf. P. S. I. VI, 551, 13, 25.

L. 29 åv

The formation of these two letters differs from the other examples of  $\omega$  and  $\nu$  in such a way as to suggest that the scribe began to write  $\delta\iota\dot{\alpha}$  and after putting down the first two letters changed them to  $\dot{\omega}\nu$ .

In P. Cairo Zenon III, 59328 Hermias reports on the goats in his keeping during the 36th year. There are 162 for which he must pay a rental of 162 kids, in addition to 4 obols each. He lists the kids of which he has already disposed. 34 have been accounted for when column I breaks off. A trace of writing on the lower edge indicates that at least one line has been lost. There may also have been a blank space of one line preceding the account for Tybi, which begins at the top of column I of P. Wis. 2. Deliveries of cheese and kids to Athenagoras by Limnaios during the first 5 days of the month are enumerated. This leads directly to column II of P. Cairo Zenon III, 59328, which starts with deliveries to Athenagoras by Antipatros on the 6th of Tybi and continues with an account of additional deliveries to Athenagoras, Theophilos, and Eukles on succeeding days. One or two lines are lost at the bottom of column II of P. Cairo Zenon III, 59328, followed by an empty space of one line, (the upper edge of column II of P. Wis. 2 is blank), and then column II of P. Wis. 2 gives the final deliveries of a kid to each of the two men, Kallippos and Kritolaos. The total of 51 forms the first line of column III of P. Cairo Zenon III, 59328 and is followed by a statement of the kids Hermias is sending to Zenon, the amount of cheese he has sold and the price he has received for it, and the number of young goats which are in his charge, but for which apparently he does not pay rent. Again there is the loss of a line or two and a blank space, before column III of P. Wis. 2 begins a record of Hermias' credits with Zenon, which is continued in column IV of P. Cairo Zenon III, 59328. The first 4 items are an account of expenses which Hermias has incurred, but for which Zenon is ultimately responsible. 'Οψώνια τῆς ἐπιγονῆς τῶν ρμ heads the list. This is evidently the wages of men who look after the young which Hermias has in his keeping, but it is not clear to what herd the 140 goats belong. During Epeiph and Mesore the wages are 3½ drachmae per month. Beginning with column IV of P. Cairo Zenon III, 59328, young from Horos are added in Thoth (cf. ll. 69 ff.) and an additional man is hired for 1½ drachmae, making the total expenditure per month for the next 4 months 5 drachmae in place of  $3\frac{1}{2}$ . The writing on the recto ended with the line or two lost after l. 115, since the space which the 4th column would occupy on P. Wis. 2 is blank.

The verso of P. Cairo Zenon III, 59328 begins in a second hand and accounts for 203 goats, which Hermias had taken over from Horos and Dionysios. A more complete account of the goats which are rented out follows, written in a hand which Edgar describes as "the usual hand of Zenon or his secretary." Of the numbers written in the margin the 192 may refer to the 162+30 of P. Wis. 19 f., the 162 to P. Cairo Zenon III, 59328, 23, and the 365 to 162+190+13 of ll. 127 f. The 179 of l. 140, which are paid as rent in kind, are made up of the 111+30+38 of ll. 66 ff. These with the 21 young goats of l. 139 are perhaps the 200 which Pyrrhos and Nikandros delivered (l. 146). In the few lines lost between column I of the verso of

<sup>&</sup>lt;sup>1</sup> In P. Cairo Zenon III, 59328, 109 the name should be Κάλλωνος instead of Καλλίπτου, obviously a mistake in copying the Greek text rather than in reading, since the name is quite clear.

P. Cairo Zenon III, 59328 and the verso of P. Wis. 2, 14 must have been added to the 200 to give the number required to leave a remainder of 212 in l. 24.

The names which appear in P. Wis. 2 are all familiar from other Zenon papyri except Kritolaos (l. 13). Athenagoras has been discussed by Edgar in the introduction to P. Cairo Zenon III, 59328. Limnaios, also mentioned in P. Cairo Zenon III, 59328, 8 is called δ ἀδελφός (l. 12). It is not clear whether Limnaios is the brother of Kallippos or of the writer, Hermias. In P. Mich. Zenon 66, Limnaios, the son of Apollonios, an Aspendian, together with his brother, Demetrios, acknowledges that 153 kids are still owed to Zenon from the rent to be paid for the 144 goats which they had received from Iason. The original contract between the two brothers and Iason, dated the 39th year, is preserved in P. Cairo Zenon III, 59340 and contains the name of Hermias as one of the guarantors. According to Rostovtzeff, Demetrios, Limnaios, and Hermias appear in an unpublished papyrus in the British Museum, though he does not state in what connection.

GERTRUDE MALZ

SWEET BRIAR COLLEGE

A Large Estate in Egypt in the Third Century B.C., pp. 179 f.

# ARCHAEOLOGICAL NEWS AND DISCUSSIONS

# NOTES ON RECENT ARCHAEOLOGICAL EXCAVATIONS SUMMARIES OF ORIGINAL ARTICLES CHIEFLY IN CURRENT PUBLICATIONS

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## NECROLOGY

Robert Carr Bosanquet, an authority on Romano-British and classical archaeology, born at Alnwick, June 7, 1871, died on April 2, 1935, at Newcastle. He excavated Housesteads (Borcovicium) in 1898; was appointed Assistant Director of the British School at Athens, 1899, and became Director of the School in 1900. From 1906 to 1920 he was Professor of Classical Archaeology at the University of Liverpool. He excavated in Crete from 1901 to 1904 and at Sparta from 1905 to 1906. He was a member of the Royal Commission on Ancient Monuments in Wales, Vice-President of the Society for the Promotion of Roman Studies, of the Advisory Board on Ancient Monuments in England, and of many other societies. Among his important publications are Borcovicium (1904); Excavations at Phylakopi (1904, with others); Unpublished Objects from the Palaikastro Excavations (1923, with Dawkins);

<sup>1</sup> The Department of Archaeological News and Discussions and of Bibliography of Archaeological Books is conducted by Professor David M. Robinson, Editor-in-charge, assisted by Professor Samuel E. Bassett, Professor Carroll N. Brown, Miss Mary H. Buckingham, Professor Sydney N. Deane, Professor Robert E. Dengler, Professor Vladimir J. Fewkes, Professor John W. Flight, Professor Harold N. FOWLER, Dr. SARAH E. FREEMAN, Professor HENRY S. GEHMAN, Mr. E. BIOREN GETZE, Dr. GERTRUDE GRETHER, Dr. BATTISCOMBE GUNN, Professor Franklin P. Johnson, Professor ROLAND G. KENT, Dr. STEPHEN B. LUCE, Profes-SOT CLARENCE MANNING, Professor GEORGE E. Mylonas, Professor Robert S. Rogers, Professor Kenneth Scott, Professor John Shapley, Professor Ephraim E. Speiser, Professor Francis J. TSCHAN, Professor SHIRLEY H. WEBER, LOUIS C. West, Professor Fred V. Winnett, and the

For an explanation of the abbreviations see Vol. xxiv, 1, p. 124, and Vol. xxix, 1, pp. 115-116. and several articles in the B.S.A. (VIII–XII), in the J.H.S., and other journals.

F. Bulic, renowned in the activities of church. education, science, and politics, died July 29, 1934, at the age of eighty-eight years. He was an ardent Slavic patriot, and while professor at the college of Spalato was discharged for political non-conformity, because he attempted to introduce the Croatian tongue as a medium of instruction. He immediately proceeded to Vienna, where he began the study of archaeology and epigraphy. He became an attaché to the service of antiquities in Dalmatia, and to the archaeological museum in Spalato, which he caused to be reconstructed, and the collections of which he reclassified. At this period, Bulic was dividing his attention between the exploration of the Christian ruins of Salona and the conservation, management, restoration and study of the palace of Diocletian, within the walls of which Spalato is built. To these duties he added that of extensive research on the earliest monuments of Croatian national antiquity, and while thus engaged he unearthed the famous inscription of King Tirpimir, the first which bears a Croatian name. Bulic's greatest claim to renown was based on his excavations in Salona, where for half a century he explored the Christian cemeteries of the third, fourth, fifth, and sixth centuries. He recorded his finds in the Bulletino di archeologia e storia dalmatica, of which he was editor of the sections on Alacevic in 1883, and then director and owner in 1888. He remained in this capacity until he was replaced as director of historic monuments, at which time his successor assumed all three charges. Bulic's best known work is Palaca Cara Dioklecijan. He was honored by France with membership in the Legion of Honor and numerous scholarly societies, such as the Académie des Inscriptions. Scholars of many nations contributed to the Strena Buliciana which was published in his honor on his seventy-fifth birthday.

Duncan Mackenzie, collaborator, colleague

and friend of Sir Arthur Evans, died in Italy on August 25, 1935, at the age of seventy-six. He held an A.M. from Edinburgh University and was a graduate of the University of Vienna under Benndorf. He excavated at Melos and wrote the last chapter of the volume on Phylakopi (1904) on "Successive Settlements in Phylakopi in their Aegeo-Cretan Relations." In the J.H.S. xvii, 1897, pp. 122 ff., he published an article on "The Site of Three Churches in Melos." In 1910 in the Papers of the British School at Rome, v, pp. 87-137, he published "The Dolmens, Tombs of the Giants, and Nuraghi of Sardinia." He will be best remembered for his work at Knossos (cf. his articles on "Pottery of Knossos" in J.H.S. xxiii, 1903, pp. 157 ff.; xxvi, 1906, pp. 243 ff.). He had an original and gifted mind and subtle artistic perceptions, which were of value in the publication of the material from Knossos.

H. Erich Preuner, Professor of Classical Archaeology and Epigraphy at the University of Berlin, was born at Greifswald, May 11, 1867, and died on March 28, 1935. He made many original contributions to archaeology, epigraphy, and ancient history. His first important monograph was Ein delphisches Weihgeschenk (Bonn, 1899), and since then he has published many articles in the Ath. Mitt.; Jb. Arch. I.; Rh. Mus.; Hermes; etc. Among these may be mentioned "Ein epidaurisches Mirakel," in Rh. Mus. lxxiv, 1925, pp. 231 f.; "Zwei Hydraphoren," in Hermes, lv, 1920, pp. 174-187; "Honestos," in Ibid., pp. 388-426; "Amphiareia und Panathenaia," in Ibid., lvii, 1922, pp. 80-106; "Die Panegyris der Athena Ilias," Ibid., lxi, 1926, pp. 113-133; "Zum attischen Gesetz über die Speisung im Prytaneion," Ibid., pp. 470-474; "Aus alten Papieren," in Ath. Mitt. xlvi, 1921, pp. 1-26; xlix, 1924, pp. 102-152; "Samiaka: Skulpturen, Inschriften," in Ath. Mitt. xlix, 1924, pp. 26-49; "Archäologisch-Epigraphisches," in Jb. Arch. I. xxxv, 1920, pp. 59-82.

Christos Tsountas, the distinguished Greek archaeologist, a great authority on prehistoric Greece, born in 1857 at Stenimachos in Thrace, died in 1934. He studied at Philippopolis and later at Athens and in Germany. At Mycenae he was first the collaborator and then the competitor of the famous Schliemann, and was the first to begin the exploration of the scattered chamber tombs in the "Ville Basse." To Tsountas is due the discovery of the celebrated golden goblets of Vaphio, products of the excavation of a tholos in

Laconia. He also joined in the first archaeological investigation concerning the site of Amyclae and explored various points in the Cyclades in addition to his work in northern Greece at Dhimini and Sesklo. He was Professor of Art and Archaeology at the University of Athens from 1901 until he retired in 1925, but he continued his teaching for one more year at the New University of Thessalonica. The results of Tsountas' work have been published in numerous Hellenic journals, principally the Praktika and the Ephemeris Archaeologike. In 1897 appeared Tsountas-Manatt, The Mycenaean Age. In 1908 he published his most important book, αὶ προϊστορικαὶ ἀκροπόλεις Διμηνίου και Σέσκλου. In 1928 he published in Athens a book on Muknua and a six hundred page illustrated Ίστορία της άρχαίας Έλληνικής τέχνης.

# ORIENTAL ASSYRIA AND BABYLONIA

Nineveh.—Tacitus, Annals, xii, 13, mentions urbs Ninos... castellum. In Tacitus' time Nineveh as a whole was not an inhabited city (urbs) and was far too large (1800 acres) to be called castellum; but for the Parthian village on the mound Kuyunjik, above Assyrian terrace walls, both terms would be suitable. The other mound within the circuit wall of Sennacherib, Nebbi Yunus, would also be possible. The text of the better manuscripts requires no alteration. With this article, by R. W. HUTCHINSON (Liverpool Annals, xxi, 1934, pp. 85–88), is published a composite airplane photograph of Nineveh.

Seals of the Gods.-In Studi e Materiali di Storia delle Religioni, x, 1934, pp. 165-173, E. Douglas Van Buren discusses seals of the gods made of lapis lazuli which were worn about the neck of a deity and were used to seal documents intimately connected with the divine owner. The two seals with which she is particularly concerned are those of Marduk and Adad, and are not engraved but carved in low relief. Both are, the legends tell us, donations to the respective divinities, made, no doubt, to replace seals blurred with long use. The two seals are much alike, in spite of the fact that one is of the ninth century, the other, more than two hundred years later. There are records of seals for the goddess Usur-amâtsu, for Ea, for a goddess mentioned in the Epic of Gilgamesh, Tishpak, and Ningizzida. In early times the seal of a divinity might be made of any suitable hard substance and might display

a subject in which the owner figured prominently. Later, seals of this kind were apparently made only of lapis lazuli, and accessory figures were eliminated, the god appearing alone in full majesty.

## SYRIA AND PALESTINE

Baalbek et al. - In preparing for publication material originally gathered by members of the German expedition to Baalbek in 1901 and 1902, D. Krencker and others traveled in Syria in 1933; a report is published (Arch. Anz., 1934, pp. 265-287; 13 ills.). At Hadet a hitherto unknown temple was found. The temple precinct at Hösn Soleiman is restored in a drawing: there is a precinct wall of colossal blocks with a propylaea, dated 200-250 by inscriptions; an altar of A.D. 122; and a temple on a podium, with a characteristic Syrian raised adyton over a crypt. The temple at Niha is similar. A drawn restoration of an altar at Kalat Fakra, with an Egyptian cornice, is presented. The French rebuilding at Baalbek is guardedly approved. Numerous observations at that site are recorded and illustrated, and conclusions are drawn as follows. At first a foundation was built for the western part of the temple, at about the time of the birth of Christ; on the outside of this was constructed the facing of huge stones, and at the same time, on the east, the stonework behind it. An inscription dates one column A.D. 60; from this and the style of the capitals, the superstructure would belong to A.D. 50-150. At first it was planned to have a rectangular court before the temple, with the podium visible all around; then, perhaps under Trajan or Hadrian, to carry a raised court all around the temple, concealing much of the podium. Finally the court was extended toward the east instead. The hexagonal court and propylaea belong to the third century: Caracalla is known from an inscription to have dedicated capitals for the propylaea, and Philip the Arabian put it on his coins.

Ras Shamra.—René Dussaud summarizes the discoveries (*Liverpool Annals*, xxi, 1934, pp. 93–98). The site is perhaps Ugarit of the Amarna tablets. The uppermost level is dated 1450–1100 B.c., the second 2000–1450, the third to the third millennium; the fourth and fifth have only been recognized. In the third level, not yet well known, the pottery is related to "Susa I bis." In the second stratum, 7 m. thick, the pottery is Canaanite of the Middle Bronze Age; Egyptian objects of the XIIth dynasty occur. The first level, ca. 2 m.

thick, contains Cypriote and Mycenaean pottery, some of the latter by potters whose work is found also in Rhodes, and Egyptian material. To this period belongs the necropolis at Minet el-Beida. the port of Ras Shamra. This consists of a great number of corbel-vaulted rectangular tombs with dromoi; both type and contents are Mycenaean. The city may have been destroyed by Tiglath-Pileser I. Cunciform tablets in the Sumerian, Akkadian and Hurrian languages were found in the latest level. Most numerous and most interesting are tablets in "Protophoenician" with writing of cuneiform type, but alphabetic. The alphabet, previously unknown, has been deciphered with extraordinary quickness and success. Many of the documents, on large tablets, belong to the library of a king, Niomad, apparently a younger contemporary of Ikhnaton. Among them are parts of a Phoenician epic, in which an important figure is Keret, who became king of Tyre and Sidon after exploits in south Palestine; this region would then be the early home of the Phoenicians, as Herodotus says. Probably they started toward Byblos, Tyre, and Sidon about 3000 B.c. There is much information of Biblical interest: e.g. Terah, the father of Abraham in the Old Testament, appears as a moon-god; the tribes Asher and Zebulon appear on opposite sides in the story of Keret; and a god Yav may be identical with Yahweh.

-A preliminary report on the results of the sixth season of excavations at Ras Shamra is given by the Director, Professor Claude F. A. Schaef-FER, in The Illustrated London News, April 27, 1935, pp. 686-690, 712. A trial shaft was dug near the western edge of the excavations to determine what lay below the first and second levels, already cleared. Levels I and II contain the remains of the second millennium B.C. At a depth of about five meters, a third level was found, dating from the third millennium, and showing cultural connections with the civilization of Mesopotamia. Below this stratum, at a depth of between eight and a half and twelve meters, was a thick layer, marking a fourth level. The stone and flint tools and new types of pottery from this level belong to the great civilization which extended, in the third and fourth millennia, from the Mediterranean shores to the Persian Gulf. This discovery throws new light on the problem of the development of Eastern civilization. At a depth of fifteen meters another level was disclosed, with stone tools and unpainted pottery. This must be dated in the

early fourth or possibly even the fifth millennium B.C. The shaft had not yet reached "virgin soil" when digging was stopped.

During the remainder of the season excavations were continued in Level I, clearing remains of the fourteenth and thirteenth centuries. South of the Library a residential district was found with luxurious houses, opening on narrow streets. Several hoards of precious metals were found concealed in the walls, hidden at the time of the threatened invasion of the town at the beginning of the twelfth century, and never recovered. East of the Library the foundations of a great temple were revealed, with walls more than four meters thick. The plan is similar to that of the Temple of Baal, discovered in 1929. Two limestone stelae bearing inscriptions have been deciphered by M. Dussaud, as dedications to the god Dagon, the father of Baal, in the Phoenician pantheon. This would account for the similarity in plan of the two temples. Between the temples were buildings housing the Library and School of the Scribes. and the home of the High Priest. To the north, remains were found of a great building, probably a palace. In one room there was a bath with a pipe to carry away the water. In another room, a funeral vault of Mycenaean type had been built. It had been robbed in ancient times, but some fine pottery, pieces of ivory, and gold jewelry were recovered. A great many new tablets with cuneiform texts were found throughout the excavations, including scribes' dictionaries, contracts of sale, and religious texts. The most important discovery was a letter to the King of Ras Shamra from the prince of a neighboring state, which confirms the identification of Ras Shamra as the capital of Ugarit.

During the last weeks of excavation digging was continued in the necropolis of Minet-el-Beida, the ancient port. A large Mycenaean tomb was cleared. Beneath it were found the remains of a house. Further excavation showed that this entire quarter was built up with houses, stores, and workshops of the dye and copper industries. The development of this quarter dates after the fifteenth century, and the population seems to have been chiefly foreign.

An Ancient Semitic Mystery Play.—Theodor Herzl Gaster, in Studi e Materiali di Storia delle Religioni, x, 1934, pp. 156-164, publishes a text found inscribed in alphabetical cuneiform on a large clay tablet excavated in 1930 at Ras Shamra on the north coast of Syria. The tablet dates from about 1350 B.C., though the text is older. This was first transcribed and translated by Charles Virolleaud, but the new translation is made from a fresh collation of the original tablet. The text is here interpreted as being the libretto of a miracle play enacted at the autumn festival which ushered in the season of "early rains" and represents the birth of the savior god, or "eniautos daimon," who brings back fertility to the earth. The author points out that here we have at last an example of the Mediterranean mystery play out of which the essential forms of the Greek drama evolved: (a) an opening choral song, (b) an agon, (c) a κομμός, or lamentation, and (d) the ritual sacrifice of a goat as at the performance of Greek tragedy, whence possibly the name

Syrian Terracottas.—D. B. Harden publishes three female figurines in the Ashmolean Museum (Liverpool Annals, xxi, 1934, pp. 89–92). Two came from north Syria; so undoubtedly did the third originally, which was bought in London by Sir Arthur Evans. It has gold earrings and gold foil over a terracotta stud at the navel. All three, very similar, have flat bodies and bird-like heads. Four others of the same type, all from north Syria, have been published. Related types from neighboring regions are mentioned. Reasoning through Palestinian and Cypriote analogies, Harden suggests 2000–1500 B.C. for the Syrian figurines.

### ASIA MINOR

Cities of Asia Minor and Alexander. - In R. Ét. Gr. xlvii, 1934, pp. 346-374, E. BICKERMAN investigates the question of the relation between the Greek cities of Asia Minor and Alexander the Great, subsequent to his eastern conquests. The general opinion is that these cities, when once set free from the Persian yoke, were treated like the free cities of Greece proper and became allies of the Macedonians, the only unsettled question being whether they were members of the Corinthian League or were in an independent relation to Alexander and the Macedonian realm. Among those who have accepted this latter view almost as axiomatic are Niese, Beloch, Ernst Meyer, Bervé, Kaerst, and Jouquet, influenced probably in great measure by Droysen, who believed that the right to coin money proved the freedom of many of these cities. Bickerman insists that, though some of these cities continued to have the right to a coinage of their own, it was through

Alexander's exercise of the generally acknowledged right of a conqueror that he simply "took over" the control of the cities from their Persian lords, and regarded them, as cities formerly subject to their oriental despots, in a totally different manner from the cities of Greece and the large islands of the Aegean. The cities that resisted his onset were ruthlessly subjugated, regardless of whether they were Greek or Persian, and their male inhabitants were slaughtered or enslaved and their women carried away into captivity. Those who yielded before assault received better terms but were not regarded as equals or allies. Such terms as συμμαχία or συνθήκαι are conspicuously lacking in the case of these cities. Some of them corresponded to the civitates foederatae of the Romans and others to the civitates liberae sine foedere.

Priene. - MARTIN SCHEDE contributes three notes on Priene (Jb. Arch. I. xlix, 1934, pp. 97-108). The carvings of the temple of Athena indicate that the building belongs to two different periods. Those of the eastern part are related to the Mausoleum and other buildings of the fourth century; those of the western part to the temple at Magnesia and others of the second century. -At Priene Zeus was next in importance to Athena, Asklepios unimportant. It is probable, a priori, that the second largest sanctuary should belong to Zeus, but it has been assigned to Asklepios because of an inscription found nearby. One copy of this inscription was to be placed in the Asklepicion, one in the sanctuary of Telon. It may be that the copy preserved is the second, and that the hero Telon, along with others, had a share in the sanctuary of Zeus; anyhow, it is not certain that the existing copy stood in the so-called Asklepieion, which does not resemble sanctuaries of Asklepios elsewhere. - The north stoa of the agora may have been dedicated by Orophernes, ca. 150 B.C., or by Ariarathes. The earliest datable inscription placed there is slightly later than 130 B.C., the latest on the temple slightly later than 133; apparently the stoa succeeded to the rôle of the temple as a place for records. It was called the Sacred Stoa, probably because its central exedra served for a cult of Dea Roma. This cult could begin in the second century B.C.; but probably the exedra was first so used after Sulla.

Bruno Meyer briefly describes indications of a simple propylon, with two columns, in the east wall of the "Asklepieion" at Priene. (*Jb. Arch. I.* xlix, 1934, p. 109.)

Troy. - In Revue des Études Homériques, iii, 1933, pp. 50-93, CHARLES VELLAY continues his debate with Georges Radet (cf. l'Acropole, vi, 1931, pp. 119-128; R. Et. Anc. xxxv, 1933, pp. 257-277). Against the latter's view that Ilion-Hissarlik was regarded as the site of Homer's Ilios in the time of Alexander the Great, he advances three new arguments: (1) Plato, Laws, 682 B, says that Ilios was on a low hill with "many streams" about it; this is not true of Hissarlik. (2) Homeric Thymbra is to be located, as even Radet admits, at Akchi Keui, about four miles south of Hissarlik; all ancient authorities place Thymbra close to Ilios. (3) The "Pergamus of Priam" visited by Xerxes (Hdt. VII, 43), could not have been located at Ilion-Hissarlik. but must have been at Bali Dagh, because of the language of Herodotus, the time of year, and the route of Xerxes' army. Vellay also cites passages from Euripides, Lycurgus, Strabo, Lucan, Horace, Ovid, Philostratus, the Anthology, the Empress Eudocia and Eustathius, which testify to the fixed tradition that the site of Ilios, after the destruction of the city by the Achaeans, was occupied only by tombs and ruins, and never by a human settlement.

## GREECE

# GENERAL AND MISCELLANEOUS

Early Aegean Furniture.—In Eos, Commentarii Societatis Philologae Polonorum, xxxv, 1934, pp. 87–96, pls. I–IV, Georg Kulczycki publishes some additional material as a supplement to his earlier article, "Die Möbelformen des ägäischen Kulturkreises" (Eos, xxviii, 1930/31). He describes some new examples of various types of stools and tables found in recent excavations or among unpublished objects in Greek museums, and interprets representations of furniture on early gems and vases. He also gives some very interesting parallels from North European cultures, and shows the influence of these early Aegean types on the later Greek and Etruscan forms.

The Cults of Andania.—In Studi e Materiali di Storia delle Religioni, x, 1934, pp. 174–204, Margherita Guarducci makes a study of the cults of Andania, reconciling Pausanias' account of them with the extant inscriptions. Her conclusions are as follows: In early times the Messenians established the cult of a hero, Melaneus, to whom they were wont to offer funeral sacrifices. The Hagna

mentioned by Pausanias was probably his wife. With the conquest of Messenia by the Spartans, the cult of Apollo Karneios, the god of the invaders, was established in the sacred enclosure. When Messenia was liberated by Epaminondas, the Messenians took from Thebes the cult of the Kabeiroi or Μεγάλοι Θεοί into the temenos which had belonged to Apollo Karneios. The initiator of this cult was, perhaps, Methapos. As the Messenians entered more and more into relations with the Sanctuary at Eleusis, the cult of Demeter was finally taken into the Sanctuary of Andania, perhaps in the second century B.C. In 91 B.C. certain reforms were made in the cult by Mnasistratus, who had received advice from the oracle of Argive Apollo. Another reform took place later, probably during the reign of Hadrian, when the mysteries of the Μεγάλοι Θεοί were replaced by those of the Μεγάλαι Θεαί, and so completely that not even the name of the former remained.

Kerameikos. - A report on the German excavations of 1933-34 in the Kerameikos is given by K. KÜBLER and W. KRAIKER (Arch. Anz., 1934, pp. 196-245; 30 ills.). The investigation of the mound under the Agia Trias church was completed. In the seventh century, cremation graves were usually accompanied by trenches for offerings, though they did not actually join the graves. In the sixth century objects were placed in the cremation graves themselves, as in the inhumation graves. The burials were numerous, and the early graves were partly destroyed in making the later ones; the relative chronology is clear in excavation, and the positive chronology is determined by the pottery with Corinthian connections, using Payne's work as a basis. The period includes the three later quarters of the seventh century. Much Proto-Attic ware was found, and light is thrown on pieces previously known. To the second quarter of the century belongs a rich polychrome class of Proto-Attic. There is also a series of pieces apparently by one hand; some have ground ornament and no incisions, some abundant incisions and no ground ornament. The Nessos amphora in New York is dated 675. In 675-625 the krater is the chief Attic form; fragments of a noteworthy example, with centaurs are shown. The Phaleron style is found to have continued after 650. An amphora fragment, not shown, is assigned to the painter of the Nessos amphora in Athens. West of Agia Trias a tomb, previously found, was ascertained to contain cremation burials of ca. 570; fragments of a poros

lion which belonged to it are pictured. A grave stele of the late fifth century, from the bank of the Eridanos, has in relief sphinxes, lekythoi, and a loutrophoros.

The number of Submycenaean graves has reached 104. They yielded 95 vases. The unbroken continuity, at Athens, from Mycenaean to Geometric is confirmed; nevertheless, Submycenaean and Protogeometric are to be distinguished. Eleven Protogeometric vase burials were found, and a great quantity of Protogeometric sherds. The change from Protogeometric, in which the ground color is the red of the clay, to Geometric, in which the ground is black, occurred ca. 950. Early and late Geometric graves were found also.

Excavation. — Archaeological discoveries in Greece and the Dodecanese, July 1933—July 1934, are summarized in *Arch. Anz.*, 1934 pp. 123—196 (21 ills.).

Minoan Primitiveness.-G. A. S. SNIJDER (Arch. Anz., 1934, pp. 315-337) publishes interesting pictures made by a feeble-minded girl. They indicate vivid and complete memory of what has been seen, even several weeks before; a phenomenon which has been studied by E. R. Jaensch at Marburg and named Eidetik. They indicate no interest in structure or solidity, no inventiveness except in color, no feeling for composition. Similar characteristics are found in palaeolithic paintings, whose makers, to judge from the evidence of their skulls, were not of high mental type. Also allied is Minoan painting, with its extreme "verism" (better than naturalism or impressionism), and its indifference to structure and composition. Cretan culture is characterized by extremely refined primitiveness. The Mycenaeans, who at first were overwhelmed by the glittering Minoan "verism," nevertheless show evidence of the mental and spiritual superiority which flowered in classical Greek art.

Leonidas Monument at Thermopylae.—In 1926 FRIEDRICH STÄHLIN, at the suggestion of Felix Bölte, investigated on Hill I by the Middle Gate at Thermopylae just east of the Phocian Wall the remains of a wall of a quadrangular foundation which had long been exposed to view, though its significance had never been realized. The north and northwest sides of the quadrangle are destroyed; the south side is 14 m. long, and the east side 11.55 m. The construction technique of the wall is, on the authority of Dörpfeld, datable to the fifth century B.C.; the wall, accordingly, is interpreted as the foundation of the

Leonidas monument mentioned by Herodotus, VII, 225. Y. Béquignon, working independently, had reached the same conclusion at about the same time. (Cf. Stählin, Pauly-Wissowa-Kroll, Realencyclopädie, s.v. Thermopylen, pp. 2413-14, and sketch map, 4, p. 2399; Forschungen und Fortschritte, xi, 1935, pp. 112-13; Y. Béquignon, R. Arch. iii, 1934, p. 17, fig. 1.)

Archaeological Researches in the Valley of the Spercheios. - In R.A., Series 6, iv, 1934, pp. 14-33, Y. Béquignon sets forth the results of an investigation of the region of Thermopylae which was carried out in the summer of 1933. Along the east passage were disclosed the remains of a wall with towers at intervals which was doubtless constructed at the time of the battle between Antiochus and the Romans. Near the middle passage were found traces of what was probably the Phocian wall, and upon a hill a nearly rectangular construction which Béquignon thinks was the polyandreion, where the lion was set up in honor of Leonidas. The recent excavations have brought to light walls of a peribolos which apparently marks the site of Anthela.

Chronology of Naukratis. - EINAR GJERSTAD discusses this subject (Liverpool Annals, xxi, 1934, pp. 67-84). Herodotus indicates that there was no Greek settlement before Amasis; Strabo says that the Milesians settled there some time after their original arrival in Egypt in the reign of Psammetichos, and this also may well refer to the time of Amasis. The stratigraphical evidence, excellently presented by Petrie in his publication of 1886, is minutely examined and leads to conclusions different from Petrie's. There were four temples of Apollo instead of two; this agrees with Weickert's judgment that the capital of Petrie's first temple belongs to about 550 B.C.; really that temple is the second. Petrie's data on pottery are also examined. In Apollo I and II, early Naukratite and Milesian wares are the chief; thereafter later types of the same wares, Fikellura, Laconian and Attic black-figure. Certain Cypriote sculptures appear from the stratification to belong to the earlier period of Apollo I, others to the later period of that temple; they are not very different, so the temple did not last long; the sculptures are dated, through the Swedish dig at Ajia Irini in Cyprus, 570-550. The fourth temple, from the style of its architecture, was built about 520, soon after the Persian conquest, which presumably destroyed the third. The resulting chronological scheme is:

Apollo I, 570–555 or 600–570; Apollo II, 555–540 or 570–550; Apollo III, 540–525 or 550–525; Apollo IV after 520. If Herodotus is exact, the shorter chronology must be right and is perhaps more probable anyhow; the longer scheme gives the earliest possible dates.

Pitch Put on Doors. - In R. Et. Anc. xxxvi, 1934, pp. 177-179, P. Roussel speaks of the ancient custom of putting pitch on the house doorposts at the time of the Anthesteria, which was a festival, in part, at least, of farewell to the dead (πίπτη τὰς θύρας ἔχριον, Photius, s.v. μιαρὰ ἡμέρα). The spirits of the dead were thus supposed to be kept from troubling the living by becoming entangled in the pitch (Frazer, Golden Bough, 3rd col., Vol. IX, "The Scapegoat," p. 153). L. Deubner (Attische Feste, p. 112) thinks that it was the odor of the pitch which was supposed to keep the malign spirits at a distance. Foucart regards the custom as one of decadent times. He calls attention, however, to words occurring in the building accounts of Eleusis (I.G. ii2, 1672, Il. 171-172), πίττης κεράμια πέντε ἀλεῖψαι τὰς ὀροφὰς τοῦ Ἐλευσινίου τοῦ ἐν ἄστει καὶ τὰς θύρας, but explains this as a protective or preservative measure. Roussel agrees with this explanation and adduces two passages in the Delian inscriptions, I.G. xi, 2, n. 163 A, l. 10 and n. 219 A, ll. 40-41, where pitch is bought for doors, windows, roofs, epistyles (ὅσα ἀλείφεται πίσση), and also I.G. ii², 659, where πιττῶσαι τὰs [ὀροφάs] should be emended, the author thinks on account of the spacing, to τώσαι τὰς [θύρας]. He thinks the connection of the rite with the Anthesteria is certain and regards it as a sort of varnishing in preparation for the heat of summer, with perhaps some purifactory significance.

#### **ARCHITECTURE**

Charmyleion.—Paul Schazmann publishes (Jb. Arch. I. xlix, 1934, pp. 110–127) the results of his study and excavation of the Charmyleion, a heroön and family tomb in the village of Pyli in Kos. The dedication to Charmylos is assured by an inscription. The foundations are 9.5 m. by 7.61 m. The crypt consists of a central passage, vaulted in limestone, with six tomb chambers on each side. Each chamber was closed by a slab, carved with decoration imitated from the end of a sarcophagus. The crypt was reached by a stair in the middle of the façade; on each side of it a stair led up from the ground to a door of the upper level, where there was a double stone floor with stones 48 cm. high

between the slabs. Above this floor nothing remains in situ, but fragments are abundant. There were two chambers, each with its ornamented door. Above these were two free-standing Ionic columns between antae; over them, an Ionic entablature of Asiatic type and probably a gable; pilasters at the corners of the building, and a hip roof. The walls consisted of high and low courses in alternation. Carved ornament was abundant and good. Architectural style and technique indicate a date around 300 B.C.

Theater of Dionysos at Athens.—The recent investigations by E. Fiechter in the Theater of Dionysos at Athens, which will be published in a book, are briefly reported in Arch. Anz., 1934, p. 543. Three periods in the history of the pulpitum are distinguished. Dörpfeld is right in deriving the Hellenistic paraskenia entirely from those of the fourth century. The foundations of the first stone skene belong to the second half of the fifth century; it was preceded by a wooden skene. The long hall, next the old temple, is still older. The bit of wall which Dörpfeld has regarded as part of the old orchestra is really a terrace wall. The true early orchestra was only ca. 20 m. in diameter.

Altar at Olympia. - The position of the altar of Zeus is known only from Pausanias, since Dörpfeld's recent excavations have shown that no existing remains can belong to it. For the unintelligible ἐκάστον of Paus. V. 13, 9, is to be fread έσχάτου; 32 feet is the circumference of the flat top of the ashes. The altar at Samos, to which Pausanias compares that at Olympia, is known from recent excavation: in its earlier periods there was a small stone platform, with a step in front and the ashes were heaped at its back and sides; later the platform was much enlarged, the ashes preserved on it and protected by a parapet, and then a flight of steps was substituted for the single step. This is the type made glorious in the Great Altar at Pergamon, which probably contained the ash altar mentioned by Pausanias, as at Pergamon. At Olympia the lime content of the Alpheios in spring flood made it possible to build the ashes into a high mass, in which steps were cut; this rose on the original platform, the "prothysis." In criticising previous discussions, it is noted that no conclusions can be drawn from the altar of Hieron at Syracuse, where Koldewey's reconstruction is open to question. (HANS SCHLEIF, Jb. Arch. I. xlix, 1934, p. 139-156; 13 drawings.)

Kalydon.—A plan and brief description of a building at Kalydon is given by E. Dyggve (Arch. Anz., 1934, pp. 311-314). A colonnaded court had rooms on three sides; on the fourth, only an apsidal exedra. One of the rooms was a cult-chamber; behind it was a rectangular exedra, below which was a rock-cut chamber tomb with two stone couches. Inscriptions show that the building was a family heroön and date it to the second century B.C.

The Opisthodomos. - The opisthodomos question seems not yet settled and the literature is becoming enormous (cf. the recent articles of Dinsmoor, A.J.A. xxxv, 1932, pp. 146-172, 307-326; of Dörpfeld, Ibid., xxxvii, 1934, pp. 249-257 (wrongly cited by Hess, p. 22, as vol. xxvii); and of Zschietzschmann, Klio, xxvii, 1934, pp. 209-217). In Klio, xxviii, 1935, pp. 21-84, is a long article by Antonius Hess, "Der Opisthodom als Tresor und die Akropolistopographie." There is a detailed enumeration of the ancient methods of preserving money, the places where the receptacles were stored, and the treasure-rooms. Under the first head are vases, purses (used mostly in private business), and strong-boxes. All kinds of Thesauri are discussed, though no reference is made to D. M. Robinson's article on the subject in A.J.A. xxviii, 1924, pp. 239-250, or to the dissertation of Robinson's pupil, H. N. Couch, "The Treasuries of the Greeks and Romans," published in 1929. The objects represented on the relief at the top of I.G. i, suppl., p. 141, 39a (illustrated on pl. I, p. 32) are interpreted as stamni for holding coins. In I.G. i2, p. 313, 178, money is to be put in a bronze κοίτη ἐκ τῆς τ[ετάρτης θέκης]. This would be the original safe-deposit box which Hess reconstructs on p. 41 with an illustration to show twelve compartments. For 10,000 talents 10,000 stamni would be needed, for 7,000 talents at the time of the Kallias decree, which Hess dates in 434-433, 7,000 stamni would be needed. Some of the money, however, would be stored in κοῖται, and a κοίτη might have as many as 150 θῆκαι and be 2.40 m. long by 1.00 m. wide. By illustrations and three detailed tables (pp. 81-83) it is shown that 400 square meters would be necessary for 10,000 stamni if placed on the floor. Then, with the help of modern banks, Hess reckons out how much space is needed if there were shelves or if money was piled up in bags and chests as well as in stamni. The conclusion is that there was not enough space in the Old Athena Temple or in the west room of the Parthenon. Hess believes that at

the time of the Kallias decree there was only one treasure-house on the Acropolis, the opisthodomos or θησαυροφυλάκιον. The three west rooms of the sixth century temple were too small and, therefore, that building cannot be the opisthodomos. The west section of the Parthenon was also too small. The only building which will fit is that of which there are ruins at the extreme southeast of the Acropolis where the museum is today. Here are traces of the opisthodomos, more than twice as large as the west room of the Hekatompedos. This lay at the rear of the Acropolis and could be called "the rear building" or opisthodomos, as Milchhoefer and Nicole previously believed. Hesychius, Strato in the Anthology, xii, p. 223, and many other passages demonstrate the use of the word as a separate building. The middle room of the Old Athena Temple was probably the Kekropion as well as the sixth century treasurehouse, but this sixth century temple remained a ruin after the Persian destruction. The west part of the Parthenon was the ἐκατόμπεδος νεώς, perhaps for the cult of Athena Ergane, the east part was the Παρθενών (wrongly accented by Hess

Temple of Kabeiroi in Samothrace. - In Jh. Oest. Arch. I. xxix, 1934, pp. 1-22 (22 figs., 2 pls.), ARNOLD SCHOBER discusses fully the date of the new temple of the Kabeiroi in Samothrace, A. Salac's view that a recently discovered architrave (?) block, which was found 30 meters away and which bears a dedicatory inscription similar to that on the Propylon and naming Ptolemy II, Philadelphos as the builder (B.C.H., 1925, pp. 244 ff.), may cast light upon the temple's date, is incorrect, for the extant fragments show that the architrave bore no such inscription. We are therefore thrown back on architectural evidence, moulding, cymatia, cornices, etc., as well as the relation of the temple to other buildings in the precinct and on the stylistic indications offered by the pediment sculptures themselves. Schober treats these questions in great detail and describes fully, with excellent illustrations, the sculptural remains, now in the Kunsthistorisches Museum in Wien, including several fragments of feet, hands, etc., which he regards as belonging to these sculptures. He essays a rearrangement of these figures in the actoma and thinks they represent the μεγάλοι θεοί: Axieros-Demeter, Axiokevsa-Persephone, Axiokersos-Hades, and Casmilos-Hermes. Comparing these statues and an Akroterion Nike with the famous Nike of Samothrace,

he fixes on the middle of the second century B.C. as the probable date of temple and sculpture.

#### SCULPTURE

Hermes of Alkamenes. - In Jh. Oest. Arch. I. xxix, 1934, pp. 23-31 (7 figs.), Camillo Prasch-NIKER treats of the Hermes of Alkamenes in Ephesus, found in 1928 in a very imperfect condition near the stadium and now in the Smyrna Museum. After commenting on the modern change in attitude toward Furtwängler's attempt in his Meisterwerke to recover the ancient Greek sculptors through Roman copies and replicas of their work, and insisting that the Roman sculptors often transformed rather than copied their Greek originals (S. Curtius' Zeus und Hermes, Studien zur Geschichte ihres Ideals und seiner Ueberlieferung illustrates this recent tendency), Praschniker inclines to agree with Curtius' contention as stated in his chapter of the above book, entitled Bärtiger Götterkopf, that too much weight may easily be placed on the inscription on this Hermes-stele, which reads: Οὕκ ϵίμι τέχνα | τοῦ τυχόντος | ἀλλά μου | μορφὰν ἔτευξε[ν] | ην σκόπησ' 'Α[λκα] | μένης.

After describing fully the artist's treatment of hair and beard and comparing the head with other Hermae in Pergamum (now in Istanbul), Rome (Gardino Barberini), Munich (Glyptotek), Berlin, and Leningrad (Hermitage), the author concludes that the Ephesus Hermes is not a copy of the Pergamum type, which is also definitely ascribed to Alkamenes, but is closer to that of the Munich-Leningrad Hermes, so that the question arises whether we may not here be dealing with another work of Alkamenes or with another Alkamenes, thus perhaps once more raising the ghost of a second Alkamenes. Praschniker thinks the problem is simplified or done away with by supposing that the copyists did not really know just what the Alkamenes Hermes was like! The large number of copies of the Munich-Leningrad type is perhaps an indication that this is closer to the original.

Athena Parthenos.—F. W. GOETHERT remarks unfavorably on recent hypotheses on the Athena Parthenos (Jb. Arch. I. xlix, 1934, pp. 157–161). The traces on the Parthenon floor do not support Lehmann-Hartleben's views; neither do coin-types that seem to be derived ultimately from the Parthenos, nor the well-preserved statuettes. The Pergamene Athena, an inexact imitation, probably lacked some attributes altogether and tells little

about the original. The dowel-holes used by Dinsmoor as proof of a Hellenistic reconstruction of the base may be Byzantine; there is no indication that the fire in the building affected the statue; and the destruction and replacement of so famous a statue surely would be mentioned in literary sources.

The Wounded Warrior of the Agora of the Italians at Delos. - In an article dedicated to the memory of Salomon Reinach and Maurice Holleaux, CH. PICARD discusses this statue, now in the National Museum at Athens, in some detail. In 1910, at the suggestion of Holleaux he had published (B.C.H. xxxiv, 1910, pp. 537-548) a list of the signatures of Agasias, son of Menophilos, of Ephesus, found at Delos. He now believes that he was wrong in denying any extant sculptures to this man, and considers that Reinach was right in connecting the group of sculptures from the Agora of the Italians, and particularly the above monument, also called the "fighting Gaul," with this sculptor. This statue was found by Salomon Reinach in August, 1882, in one of a group of "loggias" of the north portico of the Agora of the Italians; in another loggia was found a fragment of a statue base, with a dedication in Latin. and the signature, in Greek, of Agasias, son of Menophilos, of Ephesus. Reinach considered that statue and inscription belonged together; this view was disputed, principally by G. Leroux and Wolters. Wolters believed the statue to be one of a group, and would consider the figure to be fighting against a mounted enemy, coming from the spectator's right. Later, an inscription translating the Latin dedication into Greek was found; this could not have been put alongside the Latin stone, as has been suggested, to hold the second statue, for the size of the room in which the statue was found, and where it was probably set up in antiquity, is too small for such a long base. It does go underneath the Latin dedication, where it fits with absolute accuracy. This means that the adversary against whom the wounded warrior was fighting must have been on foot. The weight of a mounted enemy could not have been borne on the base, without some heavy support like a tree-trunk, which does not exist. Leroux notes that the statue is made of a marble not found elsewhere on Delos; Picard considers this marble Asiatic. The statue is of a barbarian; the nudity is not idealistic, but realistic, the anatomy finely rendered; the circumstances of its discovery prove that it cannot be of the Pergamene school,

as has been suggested, but that it must date in the end of the second century B.C., which is exactly the period of Agasias. It is one of the most individualistic examples of Hellenistic sculpture in its anatomical treatment, and recalls in certain ways the "Borghese Warrior" in the Louvre, the work of another Agasias of Ephesus, son of Dositheos. The pose does not require a mounted adversary, but is really more suitable for a victorious enemy on foot, who has the figure at his mercy. A wound on the right leg is shown, probably from an arrow. It is suggested that this adversary is to be considered a god, and by comparison with similar extant groups (i.e., a mirror from Elis in the British Museum, showing Artemis conquering a warrior, a stele in the Museum of Istanbul, where Herakles is represented subduing a giant, and some Calenian phialae, one of which is published) it is suggested that the deity is Artemis.

To resume: the statue should no longer be separated from the inscribed base, and the statue is of a barbarian, fighting, not against a horseman, but an archer-goddess, fighting on foot. This, however, brings up the following questions: Why did Romans, coming from Alexandria to Delos, offer in their agora, about 100 B.C., a group of this kind as a dedication to a legatus, as an appreciation, not only of his good offices towards them, but of his military virtues? Why did they employ an Ephesian sculptor? Why evoke a combat-scene of this kind? A careful study of the inscription must be made to answer these questions. The name of Gaius Marius is suggested as the Roman legatus to be honored (the name is missing on the base as preserved) and the monument may commemorate his victory over the Cimbri and Teutones. We know that Marius visited the East in 99 B.C., and on his way he would have been obliged to stop at Delos. The Italians in Alexandria were rich and powerful, and grateful for favors received. Other monuments set up by them have been found at Delos, so that their part is easily explained; and Marius was of the equestrian order, one of their own class. The title, legatus, is translated in the Greek as πρεσβευτής, therefore his mission was probably not military. As for employing Agasias, that was also natural; he was in high repute, as many other signatures attest. And the character of the group, together with the use of the word virtutis (translated by ἀρετῆs in Greek), shows that the monument commemorates not merely

political merit, but above all a military victory,which Picard suggests was that over the Cimbri and Teutones, who invaded Gaul in 113, defeated a Roman army in the Eastern Alps, descended the Rhone valley, and again in 105 defeated the Romans at Orange. In 102, Marius succeeded in defeating them completely. This would justify the erection of a monument in his honor at Delos, showing a Western barbarian defeated by Artemis, who was not merely held sacred at Delos, but was the patron goddess of the sculptor's home, Ephesus. The Galatian helmet beside the warrior can be explained by the ease with which these barbarians could be confused with Galatians, who had appeared all over the Eastern world. Especially could Cimbri and Cimmerians be confused, and these latter had appeared before Ephesus. Picard considers this dedication to Marius the probable restoration of the lost parts of the inscription; if so, the group would be dated between 99 and 88 B.C. (date of the Mithridatic War), but nearer 99. It was perhaps destroyed by the troops of Mithridates in the destruction of Delos in 69 B.C., and not restored, owing to the hegemony of Marius' arch-enemy, Sulla, and his successors. (B.C.H. lvi, 1932, pp. 491-530; pls. xxiv-xxvi; 5 figs.)

Dionysiaca.—In Röm. Mitt. xlviii, 1933, pp. 153–181, Otto Brendel, examines a relief in the Boston Museum which apparently represents a Dionysiac sacrifice but presents certain difficulties. He shows it to be a modern work of art. Pompeian paintings represent the same scene and figures with certain notable differences which show that the Boston relief rests upon a misinterpretation of the theme. But the artist of the relief is not the misinterpreter. It is Antonini, who in 1821 published an antique crater bearing a relief, which was not, as he claimed, an antique, but was executed by himself through fantastic playing with the motives of the Pompeian paintings. The relief in question is apparently a copy of it.

In Part II the author discusses the *Hore* in neo-Attic art, especially one whose identity is uncertain. She brings with her a goat or kid, and opinions vary as to whether she is Spring or Autumn. Brendel points out that both her dress and offering are indicative of her participation in Dionysiac sacrifice. She represents the season to which they belong, the Spring.

A Bronze Herakles.—In the Benaki private collection in Athens is a small, late archaic bronze Herakles (h. 33% in.) of the striding,

weapon-brandishing type which is familiar through similar statuettes of Herakles or Zeus and the large bronze statue of Zeus from Artemisium. The new example, somewhat doubtfully said to be from the Ptoan sanctuary, but certainly of Peloponnesian origin, represents the short, thick-set, strong-man, the ideal of the hero. It may be dated at the end of the decade, 490-480 B.C., and shows the transition to the classical style from the slightly earlier scheme of a figure composed in two planes at right angles to each other, such as the Herakles from Perachora at Athens and the Zeus from Dodona in Berlin. In the Benaki statuette, when seen with the head and left leg in profile, the body is three-quarters frontal and the right arm is more naturally bent, with the club held behind the head, not crossing it. The weight is thrown evenly on both legs, the trunk is almost square in section, and all the parts are carefully and individually studied, the effect of solidity being produced as much by the combination of strongly convex minor forms as by actual bulk. Fingers and toe-nails are incised and the surface of hair and beard is indicated by small depressions, each one surrounded by an incised line. Along the inner surface of the left leg is a rather carelessly written retrograde inscription in Corinthian letters, which reads: HEPAKEAΣ, evidently a mistake for Herakleas. This was presumably added by the artist as a finishing touch, since it is not needed for identification and is not dedicatory. The hitherto unknown form in -as had been conjectured from the Etruscan Herakla. The exceptionally competent artist was evidently from the northeastern Peloponnesus and perhaps rather Argive than Corinthian or Sicyonian, but the intercourse between these three cities was so active that no positive distinction can be made at present on the basis of style. (H. G. G. PAYNE, J.H.S. liv, 1934, pp. 163-174. Cf. also A.J.A. xxxviii, 1934, p. 591.)

Dodona Bronze.—K. Neugebauer discusses (Jb. Arch. I. xlix, 1934, pp. 162–180) a familiar bronze statuette, now in Berlin. It is Zeus rather than Poseidon. There are stylistic relations to various pre-Lysippan works, conspicuously to the Genoa slab of the Mausoleum frieze. The proportions are not Lysippan, but suggest the words used by Pliny of Euphranor. A survey of bronzes more or less surely Corinthian or Tarentine suggests that the former were abundant at Dodona in the sixth century, the latter in the fifth and fourth; but a Corinthian bronze might well be dedicated

there at any time. In the treatment of the hair the Zeus resembles most of all the head on a mirror in Berlin, to which are related several others; the group is connected with Corinth most definitely by a bronze in the Louvre with Leukas and Korinthos. The Zeus is a Corinthian work, made under the influence of Euphranor the Isthmian.

Hygieia.—In a lecture briefly reported in Arch. Anz., 1934, pp. 254 ff., K. NEUGEBAUER suggests that the original of the Hope Hygieia type stood in the Asklepieion on the south slope of the Acropolis.

Heros Kyzikos.-In Röm. Mitt., 1934, pp. 305-316, Ludwig Curtius objects to the identification of a statue acquired by the Metropolitan Museum about five years ago as Protesilaos. Considering both this statue and the fragmentary copy of the same original in the British Museum, he comes to the conclusion that the object at the front of the base of the British Museum statue is not the prow of a ship, but a kind of pier; that the fish on the base is not a dolphin but a tunny; and that this is the hero of Kyzikos who appears on coins with the tunny fish, one of the sources of Kyzikos' wealth. He is here in the act of aiming at the tunny with a trident. This explains why the British Museum copy is from Kyzikos. It was probably given to Kyzikos in recompense for the original which was taken to Rome.

Mantinea Stele. - In this well-known relief, a peplos-clad woman holds a liver, suggesting inspection of omens; the right arm, mostly lost, was raised, probably in a gesture of prayer; a palm tree symbolizes Apollo. Pausanias mentions many kinds of tombs in the Peloponnesos, but no gravereliefs; reliefs there were honorary monuments for heroes. This stele, then, is a monument to a priestess of Apollo who received heroic honors. It should be Diotima, the Mantinean wise woman mentioned by Plato. A number of stylistic comparisons are made; the closest analogy is a stele found in Attica (Beazley-Ashmole, fig. 106); these two and several others are assigned to a sculptor who was much influenced by Alkamenes but, by his simple, solid, vigorous, non-linear figures is identified as a Peloponnesian. Perhaps he made the stele when Alkamenes made his statue of Asklepios at Mantinea, 420-410 B.C. (H. MÖBIUS, Jb. Arch. I. xlix, 1934, pp. 45-60.)

In an excursus Möbius considers the purpose of the three-figure reliefs, of which the Orpheus-Eurydice is best known. He points out the difficulties of a connection with the theater and concludes that such reliefs, like sculptures in the round, were considered suitable offerings to a divinity; there need be no connection between the subject of the relief and either divinity or dedicator.

Olympia Sculptures. - In a remarkable article (Jb. Arch. I. xlix, 1934, pp. 24-44) E. LANGLOTZ deals with the sculptures of the temple of Zeus. Chronological arrangements hitherto suggested are wrong: the hydra and hind metopes look earlier than the Atlas metope, the Lapith girl whose hair is seized earlier than the Athena of the bird metope. Small reliefs, as models for the sculptures, were all made at the same time; in execution the metopes preceded the gables. Buschor's division of the sculptures among five artists is also rejected; several groups and figures (centaur biting boy, boy playing with toes, Theseus) show more than one hand. But distinctions between assistants and studies of detail for that purpose are scarcely worth while; the directing sculptors differ in more essential ways. Fundamental differences are well illustrated in the Kladeos (with head) and the well-preserved Seer; in the latter, compact, tectonic masses in repose; in the former, sinuous body, expressive contour and suggested movement. In the head of the Kladeos is refinement and sensibility which are foreign to the earthier character of the Seer or the Apollo. The Kladeos is Ionian, the others Dorian. The composition of the east gable is "paratactic"; the figures are complete in themselves and little connected. The west gable is essentially similar except for the groups of three toward the corners. These were additions to the original design; to make room for them, the two groups of centaur and boy, which were unfinished when the change was made, were drastically cut off. This shows a new directing artist: the Ionian who, as an assistant, had made the Hippodameia. and now completed the east gable with the Kladeos. The original director was an Argive. He designed the Atlas and Augias metopes; the Ionian, the bull, bird, and lion metopes; but in the last, the head of Athena is made by the Dorian. Both sculptors were influenced by Polygnotos; both probably were in Athens in the seventies; a head found there closely resembles the girl whose hair is seized. The "blond boy," very like the Olympia Apollo, is an Argive work, as the torso shows; yet the arrangement of the hair is Ionic. Both, with certain heads in vase-paintings,

were modelled after some youth in Athens. Dionysios of Argos made an ugly horse (Paus. V, 7, 21); the horses of the east gable are ugly; perhaps Dionysios is the Dorian master at Olympia. The Ionian master was much influenced, not only by the Dorian but by others, notably Pythagoras; he was not Paionios, as the Nike proves, but might be an elder Alkamenes.

Grave Relief in Samos.—E. Pfuhl comments briefly on a grave relief in Samos. The dead boy appears with an attendant, and that could well be the complete representation; but the living parents appear also, on a small scale and in the scheme of the funereal banquet. (Arch. Anz., 1934, pp. 342 ff.)

Sculptures at Athens.—A. Hekler illustrates and briefly discusses seven heads, mostly in the magazine of the National Museum at Athens: a Hellenistic example of the Athena Giustiniani type; a bearded portrait declared to be strongly Polykleitan; an example of the Sophokles Farnese type; a head of Herodotus found in the Agora; a small head of Plato; a good Sabina; and an interesting bearded head, ca. A.D. 300. (Arch. Anz., 1934, pp. 255–265.)

#### VASES AND PAINTING

Diligentissime Mulieres Pinxit. - This phrase, used by Pliny of the Athenian painter Nikias, is the title of an article by A. Rumpf (Jb. Arch. I. xlix, 1934, pp. 6-23). Pliny says also that Nikias gave special attention to light and shade and made figures stand out from the pictures particularly well. After remarks on the danger of interpreting such phrases without archaeological material, Rumpf examines the treatment of light and shade in existing paintings, with long lists and full citations. The first occurrence of any such feature is in works of the Brygos Painter and others close to him, where the shading of shields, rocks, and other objects is indicated by hatched lines. The vase-paintings believed to reflect the style of the great Polygnotos show nothing noteworthy; white-ground vases of related style and the paintings of the Tomba del Letto Funebre at Corneto confirm the inference that Polygnotos made virtually no use of shading. In the Pheidian period shading is used somewhat more freely, for modelling of garments, weapons, etc.; there are also a few cast shadows. In the last quarter of the fifth century human bodies are at last shaded, though rarely. Ordinarily red-figure vases do not show this treatment even in the fourth century;

but this is intentional avoidance, as is shown by the shading of figures that represent bronze statues. A group of lekythoi from the end of the fifth century are the only original Attic paintings in which shading is used freely for male figures as well as for drapery. This may well be derived from Apollodoros. Female figures are still not shaded. The same distinction exists in the Tomb of Hades at Corneto and apparently in the Golini and François tombs; in the latter, high lights on the garments occur. Vases from the region of Tarentum, with polychrome paintings on black ground, resemble the Etruscan paintings in these features. Engraved bronze mirrors and copies from Herculaneum of Greek paintings likewise show female bodies unshaded, though shading is abundant in male figures and draperies. Perhaps the earliest shaded female bodies are those on the Amazon sarcophagus from Corneto. This belongs to the time of Nikias. Probably he was the first to paint such figures; Pliny's comments are thus well explained. The pictures of Io, perhaps imitated from Nikias' work, do not contradict the hypothesis.

Dionysiac Scenes. - L. DEUBNER illustrates (Jb. Arch. I. xlix, 1934, pp. 1-5) a black-figured kylix in Stockholm and briefly discusses the meaning of this and other scenes in which women appear dancing and, usually, pouring wine before a pillar-like image of Dionysos. Frickenhaus and Deubner had found in them scenes from the Lenaia; Nilsson refers them to the Choes, partly because of the conspicuous rôle of wine in them. Phanodemos (Athenaios 465a) describes revelry with wine in the Anthesteria; but, because of the absence of men from the vases, the description does not apply to them. Wine, if not an essential feature of the orgia of the Lenaia, is by no means out of place in them. The typical pitcher of the Choes never appears in the vase-paintings. The thyrsi, torches, etc., show that an orginstic dance is represented; and in the Stockholm kylix there is no wine at all.

Ares in Koronea.—Reverting to the class of Boeotian geometricizing vases belonging in the first half of the sixth century B.C., in which scenes connected with the Pan-Boeotian festival at Coronea are shown (J.H.S. xlix, 1929, p. 160; A.J.A. xxxiv, 1930, p. 207), I. R. ARNOLD suggests that the chthonic deity who shares honors with Athena Itonea, and is represented as a snake on a lekane in the British Museum, may be, instead of Hades or Zeus Meilichios, an Ares.

The basis for this belief is an inscription mentioning a horse race  $\delta\pi\delta\tau$ 00  $^{\circ}\Lambda\rho\epsilon\omega$ s in a program of the festival in the second century, together with various hints of the original underworld character of Ares. A possible Roman parallel may be found in the October horse race from the altar of Mars in the Campus, in which the victorious horse was sacrificed to the god by the flamen. (J.H.S. liv, 1934, pp. 206–207.)

A Rare Scene from the Odyssey.—A large Attic r.-f. pelike recently acquired by the Museum of Fine Arts in Boston, and ascribed to the Lykaon Painter, is given a preliminary publication by L. D. CASKEY in J.H.S. liv, 1934, pp. 201–202. The picture on the reverse is a stock subject, Poseidon pursuing Amymone, but the scene on the obverse is Odysseus calling up the ghost of Elpenor (Od. ix, 81 ff.) and is the only known ancient representation of a scene from the Nekyia. (Cf. also Caskey's article in the Bull. M.F.A., Boston, xxxii, 1934, pp. 40–44; A.J.A. xxxviii, 1934, pp. 339–340.)

New Antiquities in the Manchester Museum. -A few objects in the Barlow collection recently given to the museum at Manchester (England) are described by T. B. L. Webster in J.H.S. liv, 1934, pp. 207-209. They are: (1) a Bronze mirror with Erotes at either side of the head of a caryatid handle, probably a Corinthian work of about 530 B.C.; (2) a little-master cylix, possibly from the Nikosthenes factory, which is undecorated on the inside and has on the outside. on a clay-ground strip between the handles on either side, a row of lively dancers in three pairs with an onlooker; (3) a red-figure cylix having on the inside a young man walking unsteadily with a stick and on the outside a drinking party of six young men with himatia, reclining on striped cushions, all in a style suggestive of the followers of the Pistoxenos painter.

#### NUMISMATICS

Hoard of Coins found on the Island of Siphnos.

—E. T. Newell describes a small hoard of silver coins found in 1930, three from Siphnos itself, seventeen from Athens, eight from Rhodes, and one drachm of Alexander III, in Num. Notes and Mon., No. 64. One of the three Siphnian coins is a rare stater, the only one of its kind yet found, which seems to have been a revival of a coinage of a hundred years earlier, and struck in Aeginetan weights. The succeeding group of "owls" reflects the dominance of Athens in the

economic life of the island. Their worn condition reflects the part they played in commerce. They all belong to the "eye in profile" type of about 393–339 B.C. The smaller group of coins of Rhodes reflects the transfer of commercial activity from Athens to the island city after the fall of Athenian commercial activity. The lone presence of the drachm of Alexander, assigned by Mr. Newell to a mint in Caria, he would explain as due to the presence in Siphnos of one of Alexander's fleets. He places the date of burial of the hoard at not earlier than 320 B.C.

Melian Staters. - A fifth century hoard of staters of the island of Melos, published by M. R. Jameson in 1909 (Rev. Num.), is made the basis of an economic study by J. G. MILNE in Num. Notes and Mon., No. 62. The hoard consisted of coins issued during a very limited period, at or shortly before 416 B.c. The large number of dies represented argues a large circulation for the coins, beyond the island itself. Milne suggests that these coins were designed to compete in the Mediterranean markets with the Athenian staters, and shows how this could be easily accomplished through a conversion of weights and values. This brought Melos into violent commercial rivalry with Athens and caused the island to share the fate of Athens' previous rival, Aegina, annihilation in a terrible massacre, the reasons for which have never been fully explained. This explanation would also account for the extinction of the Melian coins of this type, all of which perished except the one small hoard unearthed by peasant boys.

#### INSCRIPTIONS

Greek Inscriptions at Cairness House. - The two inscribed stones mentioned by J. D. Beazley with his republication in 1929 of an Attic stele of a warrior, from the collection of marbles at Cairness House, Aberdeenshire (J.H.S. xlix, 1929, pp. 1-6; see A.J.A. xxxiii, 1929, p. 556) are now published by M. N. Top. The larger one (93 lines) is the sole surviving decree of the Society of Poseidoniasts from Berytus (Beirout) resident in Delos, merchants, ship-owners and warehousemen. Besides being carelessly engraved in the first place, the stone is damaged on all four edges and on the surface, so that it cannot be restored in all details, but the purport is clear. It records the benefactions of one Marcus Minatius, son of Sextus, a Roman, who gave

money to complete the chapel (olkos) of the association, also 7,000 drachmas for other purposes, a banquet with sacrifices, to which all the members were invited, and a promise to continue his contributions. The honors decreed to Minatius in return are the privilege of setting up a statue in a place of his own choosing within the sanctuary and a painted portrait as a dedication in the temple, a day to be celebrated in his name each year in connection with the Apollonia, an ox bearing a suitable inscription to be furnished each year for the procession of this festival, and the wearing on certain occasions of the gold crown which he had himself presented. To insure the perpetuity of these honors, stringent rules with curses and fines for infraction and blessings on those who observe them were decreed. The date was apparently not long after the archonship of Phaidrias, which was about 153/2 B.c. The second inscription, which is in almost perfect condition, was published in 1836 but afterwards lost sight of. It is I.G. vii, 3197, one of three found on the site of Orchomenos in Boeotia, which record the names of victors in the Charitesia, a musical festival in honor of the Graces. It probably belongs in the early part of the first century B.C. It mentions also the Homoloïa, which are by some assigned to Thebes, but without good reason. Several of the names recorded here occur in other agonistic lists of victors at Orchomenos and elsewhere. The peculiar forms of the letters used are given and various earlier readings and interpretations are discussed and corrected. (J.H.S. liv, 1934, pp. 140-162.)

A New Fragment of the Athenian Decree on Coinage. - In the American Journal of Philology, lvi, 1935, pp. 149-154, DAVID M. ROBINSON publishes a new inscription (dating about 423 B.C.) from Aphytis with some twenty-five lines which precede the text of the decree as given in Tod's Greek Historical Inscriptions, No. 67. Cities are to hand in their money and receive Athenian coins in exchange. A quota of the newly minted money shall be given to Athena and Hephaistos when the repayment in new funds is consummated. The Board of Eleven are to punish with death anyone who introduces or puts to vote a motion to permit the use or loan of foreign coinage. The phraseology resembles Aristotle, Constitution of Athens, 52. Since this article was published, the Italians have discovered at Cos an inscription which overlaps the beginning of the Aphytis text.

#### ITALY

#### GENERAL AND MISCELLANEOUS

Baone.—Among less significant finds, Adolfo Callegari describes a small bronze bust of Constans, an inscribed fragment of an amphora and part of a *cippus*. (Not. Scav. ix, 1933, pp. 386–388.)

Civitavecchia. - Ugo Bellini recounts his inspection of a prehistoric cave at Sasso di Furbara, which has not been disturbed, at least in recent times. Within were found sherds, a small hatchet, the bones of animals, etc.; there were also ten rough stones arranged in a circle about two feet in diameter around a grindstone and a knife. The purpose of this circular layout is not known. The sherds are of handmade pottery with incised geometric decoration. Insufficient evidence is available to date the cave. (Ibid., pp. 395-397.) On pp. 398-421, S. Bas-TIANELLI writes an account of the excavations in the Taurian or Taurine baths conducted by Mengarelli at Civitavecchia from September, 1927, to December, 1928. Previous campaigns were in 1912, 1913 and 1922. There is a detailed description, with photographs and a full-page ground plan, of the baths; a study of the purposes of the various rooms, their decoration in marble and stucco, the remains of hypocausts, etc. Also reported are antiquities found in the baths, travertine column-bases, the lower part of a female statue in marble, fragments of glass window panes, etc. Most noteworthy is a fine Parian marble head, two-thirds natural size, of a Nymph; the waters of the bath were under the protection of the Nymphs. (Cf. Not. d. Scav., 1923, fasc. 10-12.) The exploration is not yet complete.

Coseano.—Three stone urns have been found here. Two contained a few small antiquities—the broken handle of a bronze strigil, a bronze fibula, two bronzes of Augustus and an iron knife—the third, bones only. Degrassi describes also a bronze clasp, decorated with small circles and bearing traces of silver plating. (Ibid.. ix, 1933, pp. 385-386.)

Este.—Several small objects—a tiny herm, rings, buttons, etc.—of red amber, and a silver mirror found some years ago in a tomb at Morlungo, are now reported by CALLEGARI. (*Ibid.*, pp. 388–389.)

Merlara. – Remains of two bronze vases and numerous bronze tools discovered here in 1931 are reported and described. There were two

axes and parts of four others, a fine spearhead and pieces of several others, a chisel, twenty fragments of sickles, etc. These tools belong perhaps to the third phase of the bronze age according to Déchelette's classification. Their occurrence is rare if not unprecedented in Venetia, whither they were perhaps imported. But the vases are of the iron age. CALLEGARI supposes that the bronze, disused, was set aside in the vases for some religious use. There are recorded also a copper knife and a fine bronze axe. These remains provide evidence that the area was inhabited in the iron age as in Roman times. A postscript adds mention of a large copper axe and a small bronze eagle, perhaps from the sceptre of a cult statue of Jupiter (Ibid., pp. 390-394.)

Umago.—Degrassi describes a fragment of a bas-relief apparently from a sepulchral monument, showing a Medusa head and a shepherd's pipe of unusual type. Also reported found are a fragment of a stele, with the gentile names Calpurnius and Roscius, and a small piece of a cornice. (*Ibid.*, pp. 383–385.)

Veii. - E. Stefani reports a number of chance finds in the necropolis. Five urns which were found near the large group of burials described in Not. d. Scav., 1929, pp. 330 ff., are illustrated and described. Found in the urns were a few small objects of bronze, fibulae, etc. There have been brought to light in various parts of the necropolis also the following: an ossuary of the Villanovan type, part of a small bowl, a small earthen pot, a pair of fibulae, and another fibula of bronze, and two late cinerary burials. The first of these burials had an ossuary with a rough plate for cover, nine gold fibulae, ten small square plates of gold which apparently composed a bracelet, a pair of small spirals of gold, a gold seal ring whose type is a sphinx and lotus tree, and another gold ring. The other burial consisted of ossuary alone. (Ibid., ix, 1933, pp. 422-430,)

The Association of Augustus with Jupiter.—
In Studie Materiali di Storia delle Religioni, Vol.
ix, 1933, pp. 203–224, Margaret Ward has collected the evidence for the association of Augustus with Jupiter, gathering material from literature, coins, dedicatory inscriptions, and engravings, and grouping it under the following headings: (A) The Poets' Association of Augustus with Jupiter, (B) Augustus as Zeus Eleutherios, (C) Augustus as Zeus in Asia Minor, (D) Augustus as Jupiter in the West, (E) Livia as Juno. The poets see in Augustus' exploits a new Gigan-

tomachia. Ovid waiting in banishment views him as an angry Jupiter hurling his thunderbolt, and again as a merciful god withholding his weapons. Ovid, Horace, and Manilius laud him as judge and inspiration of their song. Egypt, freed from Antony and Cleopatra honors him as Zeus Eleutherios. He is also "Eleutherios" in Cos and Lesbos, "Patroos" in Halicarnassus, "Olympios" in Lesbos, and "Boulaios" in Pergamum. In the west he is more rarely represented as Jupiter but there are occurrences of such a representation of him at Nîmes, Zara, and Herculaneum. It is as a natural outgrowth of Augustus' association with Jupiter that Livia is celebrated as Juno in poetry and inscriptions and appears in the guise of that goddess on coins.

The Development of Monarchical Ceremonial at the Court of the Roman Emperors. - In Röm. Mitt. xlix, 1934, pp. 3-118, Andreas Alföldi makes a study of the development of monarchical ceremonial at the court of the Roman emperors. He points out that the sources which represent Diocletian as the first to have introduced certain monarchical practices into the court from Persia are not trustworthy, for they are strongly influenced by early Greek and Roman literature, in which the Persian monarch is the example par excellence of the tyrant, and by the zeal of antiquity for εὐρήματα, a Peripatetic heritage. The ceremonial customs of Diocletian's court were by no means a complete innovation. The germs of some of them lurked even in Roman republican institutions and became formalized gradually under the influence of Persian-Hellenistic court customs. Alföldi discusses these ceremonial practices in detail. Dividing his investigation into two parts, he takes up (1) the greeting of the emperor by individuals, and (2) the greeting of the emperor collectively and his public honors. In the greeting by individuals, the salutatio was the characteristic honor offered the princeps, the adoratio, the honor offered the dominus. Even for the latter, we find a precedent in republican Rome in the kneeling of the supplex. Very often a visitor to the emperor was a supplex, and thus his kneeling was not extraordinary. It was only when it became the formalized mode of greeting the emperor that it was a distinctly monarchical ceremony. Largely as a result of the attitude of the Christians toward the adoratio of the emperor's image, it became no longer the honoring of the individual but the honoring of the office, an expression of loyalty.

Also in the greeting of the emperor collectively and the public honors offered him, formalization took place. The free speech with which Augustus was originally addressed soon became a formalized mode of address. In the imperial insignia of honor one can see the relics of republican insignia. The emperor has the insignia of the various magistracies which he holds; the right of wearing triumphal garb is his, not only on the occasion of a triumph, but on any public occasion.

The use of fire in imperial ceremonies, as shown in a series of reliefs gathered by F. Drexel (Phil. Woch., 1926, 157 ff.), is obviously a practice of the imperial cult, but not the one suggested by Drexel. On the arch of Trajan at Beneventum, for example, the representation of the youths gathered about a great candelabrum probably shows the announcement of a  $\theta\nu\mu\epsilon\lambda\kappa\delta\dot{\sigma}$   $\dot{\alpha}\gamma\dot{\omega}\nu$ . The carrying of torches before the emperor in processions had a precedent in the privilege accorded Roman magistrates of having lights carried before them at night. But whether this is fundamentally the origin of the imperial custom, or whether the Persian-Hellenistic customs were a stronger influence, is a question.

The whole development of Roman court ceremonial will be clearer when a study has been made of the *insignia* of the Roman emperors. Alföldi has chosen this as his next undertaking.

Roman Representations of the Months.-In Röm. Mitt. xlviii, 1933, pp. 277-283, Sophie Korsunska publishes a Roman mosaic of the Ermitage with a representation of the month, June, as a boy with a dish of fruit and a basket of crabs. He is standing between two tables on which lie fish and white objects with streamers. On the floor are a basket of fruit and a fish. Above is the designation Junius. The presence of the crabs is explained by the fact that in June the sun enters into the zodiacal sign of Cancer. The fish have merely been added as still life decorations, a motive common in the fourth Pompeiian style. The use of perspective and the treatment of the figures represented as in a painting with an impressionistic tendency indicate also the period of the fourth Pompeiian style. This mosaic is not of the type of the other known representations of the Roman months which are apparently all to be attributed to one archetype; this one probably goes back to an earlier archetype. It is of outstanding workmanship.

A New Interpretation of the Great Paris Cameo. - Ludwig Curtius. in Röm. Mitt. xlix,

1934, pp. 119-156, has given a new and extremely interesting interpretation of the great Paris cameo representing the family of Tiberius. The figure in armor, appearing before the throne of Tiberius, is not Germanicus, as has formerly been supposed (the apotheosized rider in the upper stratum is Germanicus); this armed figure is Caligula, as a young prince (possibly as princeps iuventutis), being presented with a helmet after the celebration of the Troja. The goddess Iuventas beside him helps him adjust the helm. At the extreme left is Honos, with a scroll, ready to record the deeds of the princely youth. The child fleeing from him, as if in apprehension of his fate, is Tiberius Gemellus, son of Drusus the younger and Livilla. Tiberius as Iupiter and Livia as Ceres occupy the center. At the right, Claudius looks upward, arms outstretched toward the deified Germanicus (he was probably the individual who testified to the ascension), and with him Agrippina the elder gazes upward at her apotheosized spouse. The crouching figure behind Livia is Tiridates III, who was a hostage at the court of

In the upper stratum, the great central figure is Augustus, and the baffling Persian-clad figure bearing him upward is none other than the deified Alexander, who appropriately holds the globe. The figure at the left with a shield is the apotheosized Drusus.

In the lowest stratum of the cameo, Parthian captives lie grovelling. There is, thus, a definite unity in the composition. Caligula is the important figure in the middle stratum. In the upper stratum attention is directed to his father, Germanicus. The captive Parthians below, the crouching Tiridates of the middle stratum, and the Persian-clad figure of Alexander above, turn one's thoughts to the east. Caligula is to be a new Alexander. This is quite in keeping with his proclamation upon accession, though not with following events.

The work, if rightly interpreted, can be dated as originating in 37 A.D. It was probably executed at Caligula's behest to represent his designation as crown prince at the death of Drusus in 23 A.D.

The gem is quite obviously a copy, not complete in detail, of some larger work.

The Election to the Consulate of P. Sulpicius.—
This article, in its completed form, was found among the papers of the late M. Holleaux after his death, and is published in B.C.H. lvi, 1932, pp. 531–545. This event is mentioned by Polybius

in the second part of his Book XVI, as in the fourth year of the 144th Olympiad (201-200 B.C.). From this Beloch concludes that Sulpicius became consul in September, 201, making March 1, A.U.C. 554 equal to September 9, 201, or March 15 (Ides) equal to September 23. This date is rejected by Holleaux, as it places Sulpicius in an anomalous position in regard to the war against Philip V of Macedon. Livy states explicitly, doubtless following Polybius, that Sulpicius was consul when he commanded the army that was sent to Illyria and Epirus, made its winter quarters between Apollonia and Dyrrachium (Durazzo) and sent the ships to Corcyra (Corfu) to be beached. Livy also expressly states (xxxi, 22, 4) that autumn was nearly over when the expedition started. This information is also derived from Polybius, who has only two seasons - winter and summer-but starts his cold season after the autumnal equinox. In 200 this equinox came on September 26. Holleaux, therefore, believes that the expedition crossed into Epirus in the middle of September, before the equinox. Shortly after landing, Sulpicius sent one of his lieutenants, C. Claudius Cento, to carry aid to Athens, with a division of twenty triremes. Having accomplished this, Cento delivered a surprise attack on Chalcis, which he captured, sacked, and burned. This is dated by Holleaux in the middle of October; and this is confirmed by the fact that shortly afterwards, Kykliadas succeeded Philopoemen as General of the Achaean League, which could only have happened in October.

Shortly after having established his winter quarters and beached his ships at Corcyra, Sulpicius ordered from that island L. Apustius, and sent him with a body of troops to ravage the marches of Western Macedonia, especially the valley of the Apsos. This could only have happened in October, and could not have been of long duration, as the rainy season in those regions, the modern Albania, begins in mid-October, and would make troop movements and communications impossible. Beloch believes that the consulship of Sulpicius was over at this time, and that he commanded the army with proconsular rank, but this is highly improbable. Therefore Holleaux suggests that Beloch's dates cannot be accepted. and that the date of the Ides of March in A.U.C. 554 fell, not in September, 201, but in the following winter.

Italia. - Franz Altheim, in Studi e Materiali di Storia delle Religioni, x, 1934, pp. 125-155,

makes a study of the origin of the name Italia, and his conclusion that it signifies "land of the Itali" ('Irahoi) leads to a study of these people who called themselves "bulls" and had as their protective deity Mars, who was a bull god. He particularly discusses the phenomenon of the bull god, which appears in Samnium, Latium, Etruria, in Picenum in the beginning of the Iron Age, and in Sardinia as early as the Bronze Age. The author's consideration of the traces of this general cult in the west and its relation to the bull cult in the east leads him to the conclusion that there must have been a time antecedent to the historical Greek and Roman culture when the cult of the bull god was prevalent in both the east and the west, from Asia Minor to the Balearic Isles. When the Indo-Germanic tribes of Italy entered from the north and northeast, they adopted this bull god and incorporated him into their own religion. The cult remained significant until the decline of the ancient Mediterranean world, but thereafter its remnants are not easily discernible.

"Ara Martis." - In Mélanges, li, 1934, pp. 21-32, A. PIGANIOL discusses theories concerning the location of the Ara Martis, which he would place at the race field of the Equirria at the western extremity of the Campus. Its foundations may be those found in the Garden of the Sforza Cesarini Palace in 1886/1887. There is no proof that the ara was near the meeting place of the comitia. Finally, a relief of the Louvre which shows an altar with the god Mars and a magistrate ready to offer in sacrifice the suovetaurilia, is considered. The scene is interpreted by Piganiol as a meeting of volunteers and the lustration accompanying the formation of the army. Theories are mentioned that the person represented is Domitius Ahenobarbus, Agrippa, or Marius.

Discoveries.—O. Brendel (Arch. Anz., 1934, pp. 419–498, map and 25 ills.) summarizes archaeological work in Italy, Albania, and Italian Africa, October, 1933 to October, 1934. Among the noteworthy things illustrated are: a Perseus found at Ostia, imitated from the Meleager type with the chlamys; the atria of two partly rebuilt houses, one at Pompeii and one at Herculaneum; a very early metope found in the precinct of the Argive Hera at Paestum; mosaics at Lepcis; a fine relief, with Nike before a trophy, belonging to the late fifth century and found at Butrinto.

Handles.—Anna Amiranaschwili publishes two good silver handles, probably belonging to a skyphos, in the museum at Tiflis. One mould was used for both. Each has in relief Meleager, a boar's head, and an omphalos; also rosettes and swanheads. The Meleager is imitated from the well known sculptured type and has the chlamys. Similar handles are considered. The date is ca. A.D. 150. (Arch. Anz., 1934, pp. 1–10.)

The Allegory of the Pompeian Death's Head Mosaic. - Otto Brendel, in Röm. Mitt. xlix, 1934, pp. 157-179, analyzes the Pompeian Death's Head mosaic in the National Museum at Naples, 871 (109982), obviously an allegorical work. The central design, a large skull, represents the mortal body; beneath it, is a butterfly (the soul), taking flight. The wheel below, an attribute of Nemesis or Tyche, strengthens the underlying idea, that is, the inevitable separation of body and soul. At the right is a beggar's staff and knapsack; at the left, a sceptre, diadem, and a piece of purple drapery. Above are scales, which balance equally the two sets of emblems, i.e. of poverty on the one hand, and of riches and power on the other. The thought here expressed is clearly the "Omnia mors aequat," of Claudian, reminiscent of the Cynic teaching of the vanity of human differences. Brendel cites a gem from Copenhagen and one from Leningrad which bear out the same theme. He also relates to the mosaic and its subject, the reproduction of an ancient gem now lost, given by Borioni. In it, the scales are present, but they no longer balance the two sets of emblems. They merely stand above the head of the dead as a hieroglyphic representing acqualitas.

Venus and the Empresses under the last Antonines.—In Mélanges, li, 1934, pp. 178–196, J. Aymard first shows how Julia, Livia, Livilla, and Drusilla were identified with Venus. Later on the women of the imperial family were more often associated with Hera and Demeter. Under the Antonines, however, there is the evidence of works of art, coins, an inscription from Ostia, and a passage in Cassius Dio to show that female members of the ruling house were at least associated, and perhaps identified, with Venus. It seems that the imperial couple was thought of as Mars and Venus. The Antonines in their policy went back to the myths of Venus as ancestress of the Romans and to the Venus of the Julian family.

#### ARCHITECTURE

A Republican Pilaster Capital in Rome.— Ludwig Curtius (Röm. Mitt. xlix, 1934, pp. 222-232) adds to the series of capitals of pilasters

he studied in connection with the capital discovered on the sea bottom at Mahdia, another, a capital of the Republican period in Rome. The griffin represented belongs to the great mother goddess of Asia and that is why it takes this particular form which belongs to her. The type can be traced in its development from Asia to Tarentum, to Etruria, and finally to Rome. The little rosettes under the wings of the griffin in this capital are nothing but flourishing decorations of the ends of the volutes of the wings which appear in representations of the Asiatic goddess whose type is here copied. The various griffin capitals to which this one is related do not all come from one temple, as Curtius once thought. They are from temples of Artemis, tomb-structures, and theatres.

Palatine Temple.—Ch. Hülsen (Arch. Anz., 1934, pp. 337–342) declares that the large building of which traces were found on the Palatine near S. Sebastiano alla Polveriera is the Augustan temple of Λpollo. Other hypotheses are briefly criticized.

Capitals.—K. Ronczewski, continuing his study of Corinthianizing capitals, discusses an example known to him only through a photograph labeled "Tarent." It has S volutes, previously known in Tarentum only in pilaster caps; the volutes have the usual Tarentine form, but the accessory leaves remind one of Sicilian and Campanian capitals; a flower in the middle, of Italic type, is rare in Tarentum. On the whole it stands between the Tarentine and Campanian groups, 200–100 B.C. A tiny capital in Erlangen is typically Tarentine in most features, but has a female bust on one side; this is rather an Italic feature. (Arch. Anz., 1934, pp. 10–17.)

The same author discusses a number of pilaster capitals (Arch. Anz., 1934, pp. 17–50; 32 ills.). Three types were used from the archaic period: the double volute type, with the lower ends of the volutes close together; the double S type; and the sofa type. After the third century B.C., Corinthian buildings often have pilaster capitals closely similar to the column capitals. In this article, Etruscan and early and late Roman examples are considered, most of them of mixed type. The principal general conclusion is that, in different cases, the first of the three types could arise from either of the other two.

Sarcophagi. – Several sarcophagi are briefly discussed by G. Rodenwaldt, who is preparing a general study of North Italian columnar sarcophagi. These were influenced by Asia Minor,

but developed separately. Regularly on the front there are three separate aediculae, of which the right contains a man, the left a woman, and the central an inscription. On the ends there are often aediculae with the arches borne by corbels. In later examples the corbels appear on the front also, and the three aediculae are joined; so in a sarcophagus in Ancona, where, however, the place of the inscription is taken by a scene of wine-selling. The style is rude but realistic. Reliefs of similar style occur elsewhere in the North Italian sarcophagi, usually on ends or back. An inscription on one example dates the group to the middle of the fourth century A.D.; it is later than the "City-Gate" group. (Arch. Anz., 1934, pp. 287-296.)

### SCULPTURE

Etruscan Sarcophagi.-R. HERBIG, who is preparing an extensive work on the later Etruscan stone sarcophagi, publishes a brief discussion (Arch. Anz., 1934, pp. 507-542; 25 ills.). The historical connection with archaic sarcophagi is not clear. The chief centers of manufacture in the fourth century were Tarquinia, Tuscania, Vulci; the chief material, gray volcanic stone (Nenfro). The various types are distinguished, with the notation that their historical relations are uncertain. The simplest type shows imitation of wood in the panels carved on the sides; the usual cover is apparently derived from a house-roof. Sometimes the influence of wood is evident when the sarcophagus is sculptured on all four sides; a fine example from Bomarzo, in the British Museum, has Greek ornament, Etruscan demons, and animal combats; the last occur frequently as the chief decoration. The covers often have a figure lying on his back at full length, but with open eyes and evidently alive. The sarcophagi in Boston, with wedded pairs on the cover, are related to this class. The figure is sometimes turned to one side, determining the chief front. Except for the covers, the foregoing sarcophagi are imitated from Greek wooden ones. In another class, columns or pilasters at the corners lend architectural character; reliefs may be on three sides, but later are limited to one; the figure on the cover is raised on the elbow, making the latest and most usual type. Figures of this sort occur in the fourth century, as the style of an example in the Villa Bruschi-Falgari indicates. Two examples, late and poor in style, are dated by inscriptions 69 and 23 B.C.; at this period the Nenfro sarcophagi come to an end. The quality of the whole series is low in general, but there are some noteworthy portrait heads.

Two Marble Tripods from Albano. - In Röm. Mitt. xlix, 1934, pp. 209-221, Eugen von Merck-LIN discusses two marble tripods from Albano, now in the Vatican (235-236). Piranesi published one of them in 1764 and sketched both where he found them set into the walls of the church of Santa Maria della Stella. He says of them that they are "chiamate abusivamente Tripodi," and in their present state, to be sure, they have four feet. Von Mercklin, however, shows that these were originally tripods. They are closely related in style to a tripod in the Museo Mussolini (781), the rear side of which is unwrought and left in block; moreover, the fourth side of the tripods under discussion is obviously of later workmanship. They were probably connected and used as barriers of some kind, possibly in the theater of Domitian near the place in which they were found. Filippino Lippi was familiar with this kind of tripod and reproduced an adaptation of it in a fresco in Santa Maria Novella in Florence. Loosely related to these tripods is one sketched in the Codex Pighianus and no longer preserved.

The Head of Antoninus Pius in Berlin.—
C. Blümel (Röm. Mitt. xlix, 1934, pp. 317–318) once more defends his belief that the newly found head from the relief portraying the Hercules sacrifice of the arch of Constantine represents Antoninus Pius as Caesar. He meets the arguments of Fr. von Lorentz, who in a previous number of the Röm. Mitt. opposed his view, and gives some of his reasons for believing that the bearded head of the large relief of sacrificing togati from Ephesus which von Lorentz identifies as Antoninus cannot be he.

Portrait of Constantius II.—Gerda Bruns (Jb. Arch. I. xlix, 1934, p. 61) publishes a better photograph of the head in Istanbul, to replace Plate V in her former article. (A.J.A. xxxvii, 1933, p. 610.)

Addenda to Dionysiaca.—Walter Müller (Röm. Mitt. xlix, 1934, pp. 319–320) mentions another relief related to the Boston Relief, Caskey No. 102, discussed by O. Brendel in Röm. Mitt., 1933, pp. 153 ff. This is a plaster relief from the Dresden collection of sculpture originally in the collection of Mengs. Since Mengs died in 1779, the relief must have been bought or formed by him at the latest in the seventies. This brings us very near the year 1765 in which the frieze of Herculaneum cited by Brendel first

appears. Both the Boston relief and the Antonini-Penna drawing mentioned by Brendel go back to the Dresden relief, the one literally, the other with artistic variations. Possibly the original is still in Rome; possibly the scalpellini of the nineteenth century had before them only a cast like the Dresden relief. The common source of all is naturally the frieze of Herculaneum. The origin of the classicistic relief is thus established as occurring between 1765 and 1779.

Orestes and Iphigenia in Tauris. - In Röm. Mitt. xlix, 1934, pp. 247-294, Ludwig Curtius makes a study of a bronze crater of Dionysopolis-Balčik, excavated in 1907 by Schorpil and published in 1932. Its relief represents in four scenes the story of Orestes and Iphigenia in Tauris, and, where fragmentary, it can be restored from a relief in the Musée Gallo-romaine of Sens, which represents the same scene. The representation shows several variations from Euripides' account. So also do the relief of Sens already mentioned, the crater of Valle Trebba in Bologna, and a Tarentine crater in Naples. The painting of this subject in the Casa del Citarista in Pompeii, on the other hand, does follow the Euripidean tradition. Curtius does not accept the three-figured Orestes relief which Buschor has reconstructed, but points out that a relief in the court of the Palazzo Mattei, if the modern additions are removed, is a three-figured Orestes relief, the original of which apparently goes back to the middle of the fourth century B.C. The crater of Dionysopolis he finds is not of the fourth or third century, as some have concluded, but is neo-Attic, probably of the Claudian period.

Pelias and his Daughters.-In Röm. Mitt. xlix, 1934, pp. 295-304, Margarethe Gütschow discusses the relief of the right side of a sarcophagus which she has pieced together from fragments in the Museum of the Catacombs of St. Praetextatus. It represents the myth of the Peliades, and shows the daughters of the aged king about to put him to death in the belief that thus they will restore his youth. Its symmetry, not schematic but alive, - the perfect balancing of parts, the careful regulation of its measurements, and its clarity of representation which is the result of unity of subject and form, all lead to the conclusion that, although the relief is of Roman workmanship of the second century A.D., it goes back to an original of about the middle of the fifth century B.C.

Summanus. - In Röm. Mitt. xlix, 1934, pp.

233-246, Ludwig Curtius discusses a relief in the Museo Mussolini (Bocconi, Collez. Capitol., 1930, 286, n. 5), which is in the shape of a temple pediment and bears the figure of a winged snake daemon, who holds lightning bolts which seem to disappear into his body. This same divinity appears in a relief in a wall next to San Pietro in Spoleto, and on Roman denarii of the first century B.C., once together with Jupiter and the quadriga. Apparently these figures all go back to an original in some Roman temple, a god of lightning who is not Jupiter, but Summanus, the god of nocturnal lightning, a chthonic deity. This Summanus was the pediment figure of the temple of Jupiter (Cic. de Divin. I, 10) and therefore these small reliefs are in the shape of a pediment. The figure does not go back to the early Tarquin temple, but belongs to the second century B.C. At the time of the war with Pyrrhus, Summanus received a temple near the Circus Maximus, perhaps in connection with his image being struck down by lightning into the Tiber. This pediment figure was probably repeated in the new temple or the second which took its place after its destruction by fire in 197 B.C. The relief under discussion would then go back to that one and finally to the relief of the Capitoline temple of Jupiter.

The Capestrano Warrior. - In The Illustrated London News, Feb. 9, 1935, p. 223 is devoted to new photographs of the sixth-century B.C. statue recently found near Capestrano. The piece was discovered by a farmer digging in his vineyard. Other fragments were recovered later in systematic excavations conducted by the Department of Antiquities. The statue, which is now in the Museo Nazional Romano, represents a warrior, standing in stiff frontal pose, and wearing on his head a helmet with a wide brim. It is undoubtedly to be connected stylistically with the culture of the eastern Appennine region, which was under the influence of importations from the east. An inscription on the right support is possibly Oscan or Picene.

### VASES

A South-Italian Volute Crater. —A large r.f. volute crater, one of two found in a tomb at Ceglie near Bari in 1898 and now in the Museum at Taranto, has often been mentioned and discussed, but is now published for the first time by A. D. Trendall in J.H.S. liv, 1934, pp. 175–179. It has small pictures on the neck, making four in all, and two of the subjects are rather rare, —

the Birth of Dionysos, on the body of the obverse, and Herakles served with a meal by young silens, on the neck of the reverse. The other two are: A1, Combat of Centaurs and Lapiths, and B2, Amazonomachy. Thus the contrast of a peaceful scene with one of combat occurs chiastically on both sides. The birth of Dionysos shows the young god half emerged from the thigh of Zeus and stretching out his arms toward Hera. This type is later than that in which a diminutive full figure of Dionysos stands on the thigh. Both the larger scenes on this vase have many figures in varied groups and attitudes, skilfully arranged with an effect of unity. The Pheidian influence is apparent in many of the details, such as the Hermes with arms resting on a raised knee. The date may be set at 410 B.C., or a little later. It is quite possible that such vases were made in Tarentum, but that question has not been thoroughly investigated.

### NUMISMATICS

Rome: Coins of the Republican Period.—A thorough study of the extensive silver coinage of early Rome with the Janus-head on the obverse and the figure of Jupiter on the reverse has been made by P. Le Gentilhomme in Rév. Numismatique, 37, 1934, pp. 1–36. The author considers the hoards which have contained numbers of these coins, and finds that, contrary to the opinions of Mommsen and Babelon, quadrigatiwere not limited to the mints of Campania, but circulated during the time of the second Punic War throughout the Roman State, both in Italy and Sicily.

These coins represent the transition between the early didrachms of purely Greek style and type, e.g., Tarento-Campanian issues and coins of the purely classical Roman type which appeared about 187 B.C. The Janus-type proclaimed the fides Romana, and made an appeal to the allies of Rome, while the quadriga called to mind her victories. After the Punic War the types turned to the protecting Dioscuri and to Rome as the savior of the Greeks, the successor of Alexander and the true descendant of the Trojans. These conclusions are arrived at by a careful study of style, types, and weights. There follows a carefully arranged table of varieties made from a study of the coins in the Bibliothèque Nationale.

### INSCRIPTIONS

New Inscriptions from the Imperial Fora.— R. Paribeni publishes and discusses 303 new in-

scriptions from the imperial fora; from the forum of Caesar Nos. 1-77; from that of Augustus Nos. 78-131; from Nerva's Nos. 132-161; from Trajan's Nos. 162-219; and from Trajan's market Nos. 220-303. Most interesting are the following: 1, a dedication to Hercules; 2, collegium fidicinum Romanorum; 3, Theoteknos as a name; 4, a dedication to Diva Sabina, December 13, A.D. 138, by Sabrathenses ex Africa, in which are named as curatores operum publicorum, Valerius Urbicus and Aemilius Papus; 7, a dedication to Arcadius by Virius Nicomachus Flavianus, praefectus urbi iterum; 8, two fragments of a hopelessly mutilated inscription of the time of Commodus dealing with an excusatio magisteri, petitioned apparently by a Valerius Januarius, and citing at least three letters to (1) a Servilianus, (2) Cornelius Proculus and Titius Aquilinus, (3) a person whose name is lost; 20, Agalmation as a feminine name; 33, a stele with the name M. Cossutius Zeuxis, later by one or two generations than the sculptors of the first century A.D., M.M. Cossutii Cerdo and Menelaus; p. 455. The statement in Dio 55, 10 that the statues to which the elogia belonged were bronze is confirmed against Vita Alexandri, 28, that they were marble, by the finding of a bronze foot; No. 78, mutilated elogium of Aeneas Silvius; 79, Silvius Latinus; 80, adds the quaestorship to the cursus of C. Julius Strabo; 81, the Dictator's father; 82, the elder Drusus; 83, five small fragments from the inscription of the arch of Drusus Caesar beside the temple of Mars Ultor; 84, dedication of a clupeus auratus to Mars Ultor by Legio X Gemina; 88, a dedication to Trajan by Cn. Octavius Titinius Capito; 94, C. Aufidius Victorinus, the friend of Marcus Aurelius; 133, a curious inscribed triangle of marble, "nel mezzo, rozzamente graffita, una figura coronata di raggi con lunga vesta, con braccio destro levato e sinistro sorreggente una sfera (Helios piu vicino a Iuppiter Heliopolitanus che a Mitra). Al disotto protome (femminile?) di prospetto (Luna?)." is referred to the fourth century and the losing struggle of Mithraism against Christianity; 162-164, like C.I.L. vi, 2943, record units of the army which took part in the Dacian wars; the last two were subsequently altered to refer to the cohors Romana palatina in the time of Maxentius; 165, the beginning of a rescript of Constantine to Proculus, A.D. 336/7; 166, of Valentinian and Valens, mentioning a Taurus probably, but not certainly, the consul of 361; 168, 169, Petronius

Probus, the consul of 371; 222, another copy of C.I.L. vi, 981, recording Hadrian's restoration of some stationes urbis; 226, a dedication to P. Licinius Cornelius Saloninus Valerianus, son of Gallienus, shortly before A.D. 258; 235, (Phi)lippianum, probably designating the district of the porticus Philippi; 3, 48, 53, 121, 181, 203, 297-299 are Greek and 130 is bilingual. (Not. Scav. ix, 1933, pp. 431-523.)

Nazareth. - In R. Et. Anc. xxxv, 1933, pp. 205-212, WILLIAM SESTON discusses an edict of Augustus dealing with violation of sepulture, supposedly found near Nazareth and therefore known and discussed for several years as the "Edict of Nazareth." This has bulked more largely in archaeological periodicals than it really deserves, owing to a mistaken idea that its provisions refer to the situation described in Matthew's gospel (xxvii, 62-66 and xxviii, 11-15) where reference is made to the danger that Christ's disciples might steal his body and declare that he had risen from the dead. Among those who have written about the inscription are Fr. Cumont (Revue historique clxiii, 1930, pp. 241-246), J. Carcopino (ibid. elxvi, 1931, p. 77 and elxvii, pp. 434-5), L. Zancan (Atti del R. Istituto Veneto, 1931-1932, pp. 51-64), and Cuq (Revue historique de droit français et étranger, 1932, pp. 109-126). The inscription states that it is the emperor's will that graves and tombs built in worship of ancestors, children or relatives (οίκεῖοι) should be perpetually undisturbed; that if anyone be proved to have injured, thrown out or removed those buried to another place by malicious guile and to the wrong of those buried or to have moved away the flags or stones of such graves, he shall be brought to trial as in the case of the gods in men's religions. The edict further states that men must honor the dead and suffer no one to move them; that otherwise the emperor wills that this man be condemned to death for desecration of a tomb. The labored phraseology indicates that the translator into Greek was not fully conversant with the language. Seston states that the inscription is too early to have referred to the burial of Christ, for Carcopino has proven that Καΐσαρ in an official document can only have referred to Augustus and Gr. DeSanctis has shown that the emperor could not have addressed an edict to the Galilean contemporaries of Jesus, for their country did not come under the direct control of Rome until 44 A.D. Even the authenticity of the inscription has been called in

question, for (rendered above as relatives) agnati were not usually buried, at any rate in Italy, with the cognati, and furthermore the punishment of death seems too severe for an offense usually punished only by a fine. There may have been, however, some question involved of defiling the temple with the bones of the dead. Several such cases are listed by the author.

The Great Bacchic Inscription of Torre Nova. -M. P. Nilsson, in Studi e Materiali di Storia delle Religioni x, 1934, pp. 1-18, discusses the great Bacchic inscription published by Vogliano and Cumont in A.J.A. xxxvii, 1933, pp. 232 ff., an inscription found at Torre Nova and now in the Metropolitan Museum. It commemorates the dedication of a statue to Agrippinilla by a group of μύσται, and the names of those contributing are listed, apparently according to their rank in the association. Nilsson, however, does not agree that Max pervos, the first name on the list, is that of a dignitary at the head of the sacred hierarchy, but believes that the use of the term #pws implies that the man died in the course of the completion of the statue and that it is for this reason that he has the first place and is designated as ήρωs. Going on to examine the titles of the various officials of the Bacchic mysteries mentioned in this inscription and other inscriptions, he points out that, in organization at least, these Hellenistic and Roman Bacchic Associations which admit men as well as women into the cult, and which have a complicated and varied system of offices and titles, are much more closely related to the cults of the Greek states than to the Oriental orgies. The very lack of homogeneity in these cults is added proof of this. He is inclined to believe that Agrippinilla founded the Bacchic Association of Torre Nova after her return from Pergamon, where she had resided during her husband's proconsulate and where she had become familiar with the Bacchic organizations not only of Pergamon, but probably of Ephesus, Miletus, etc., cults essentially Greek in organization. Her association apparently consisted of her own family and servants.

Valdarsa.—In Not. d. Scav. lx, 1933, pp. 381-383, Attilio Degrassi reports a dedication to the Magna Mater Deorum by the dedicator of C.I.L. iii, 3033.

### **ABYSSINIA**

Coin of the Kingdom of Axum. - A. Kammerer publishes in Rév. Numismatique, 37, 1934, pp.

37-43, a gold coin of King Esbaël of the ancient kingdom of Axum, dating from the end of the fifth century of our era, with a discussion of its puzzling inscription.

### ENGLAND

British Coins of the Roman Period. — Barbarous bronze coins imitated from types of Claudius I (41-54 A.D.) are studied by C. H. V. SUTHERLAND in Num. Notes and Mons., No. 65. By segregating the various types, analyzing their frequency, and noting the provenance of hoards in which these occur, he shows that they were produced in Britain and played an important part in supplementing its meagre currency.

### FRANCE

Merovingians.—A hitherto unpublished triens of Clothaire II or III in the Museum of Basle is described in *Rév. Numismatique*, 37, 1934, pp. 45-49, by Dr. H. Longuet.

The Bottom of a Neolithic Hut at Fort-Harrouard. - In R. Arch., Series 6, iv, 1934, pp. 3-13, ABBÉ J. PHILIPPE describes the bottom of a neolithic hut in the plateau of Fort-Harrouard in the commune of Sorel, Canton d'Anet (Eure-et-Loir). The cavity of the hut consisted of two sections, a lower one for the hearth and a high inclined section for sleeping. Four holes for stakes show that there was a roof. There were four hearths one above the other, and many bones and implements. The bones show that the life of the early inhabitants was pastoral. Human bones about the hearth may indicate that human flesh was eaten. Much black, gray or reddish undecorated pottery was found, though the presence of some fragments with decoration and three clay idols would date the period of the earliest occupation as near the neolithic. Many utensils of silex were discovered, and some of bone and horn.

Aix-les-Bains.—In R. Ét. Anc. xxxvi, 1934, pp. 199-205, P. WUILLEUMIER discusses an unedited inscription of Aix-les-Bains (a paper originally read before the Société Nationale des Antiquaires de France, December 27, 1933). The inscription is one rescued from the destruction which has come upon most of fifty such stones which were known to the editors of the Corpus in 1888. It reads:

SSO VM AQ SIVM DONAVER [Decemlecti posse-] sso[r]um Aq[uen-] sium donaver[unt] LVCVM CVM SVA VI NEA VICANIS A QVENS-AD LVDOS CELEBRAND-PRO SALVTE IMP-AVG-ZMERTVCCIVS TI TIANVS-P-V-ARAM D-S-D

lucum cum sua vinea vicanis Aquens(ibus) ad ludos celebrand(os) pro salute Imp(eratoris)Aug(usti). Zmertuccius Titianus, p(atronus) v(ici), aram d(e) s(uo) d(at)

"The ten members chosen among the property holders of Aix have presented a grove with its vineyard to the townsmen of Aix for celebrating games for the safety of the Emperor Augustus; Zmertuccius Titianus, patron of the town, gives an altar at his own expense."

This is the only local inscription that mentions an emperor. But what emperor is here referred to? Perhaps Octavian, for we know that he took great pleasure in formal games and he is known to have visited Gaul several times between 16 and 13 B.C. But all the emperors had the right to this title (Imperator Augustus), and the forms of the letters (though this is not a convincing argument in out-of-the-way places) and the use of the term possessores and cum sua vinea seem to indicate a time no earlier than the second century A.D. The author thinks that the term "with its vineyard" indicates that the fruits of the vineyard covered the expense of the games, and he compares in support of this idea a second inscription, C.I.L. xii, 2461 (cum suo fructu). The possessores are elsewhere mentioned as setting up epitaphs to the dead of the Gens Titia, and seem to have formed a social class from which the state councilors were chosen and these apparently numbered ten (decemlecti). Our author thinks that the letters P·V· are to be interpreted as patronus vici rather than perfectissimus vir, for the latter is usually abbreviated as V.P., and the term would hardly be used of a man of servile origin. The name Zmertuccius recalls the goddess Rosmerta and the Smertulli or Smerii. The second name, Titianus, proves that the donor or some ancestor of his was the slave of a Titius, whose gens is well known in Aix.

### MOROCCO

Venus of Volubilis.—In R. Ét. Anc. xxxvi, 1934, pp. 183–187 (fig.), R. Thouvenor treats of the Venus of Volubilis, which belongs to the group of "marine Venuses," so-called because of the dolphin which accompanies them, or to the Venuses called "modest" because of the position of the

hands, as in the case of the Venus de Medici. The statue was found in 1920 and is of carefully polished marble. Venus stands upright, with the dolphin at her left, with its muzzle on the ground and its body and tail rising backward to the middle of her thigh and joined at this point, thus serving as a support. Cupid stands on the dolphin's back, looking up mischievously at his mother and perhaps holding originally his bow and arrow, though his quiver seems to be missing. The head of Venus is lacking as well as the left shoulder and hand and the right arm nearly to the shoulder. Both of Cupid's hands are gone, as is also the dolphin's tail. From other examples we know that Venus' right arm covered her breasts and the left the lower abdomen. The group is not an original but is probably a Roman copy, one or more times removed from its more famous original. Venus rests her weight on the left leg with the right leg flexed and the foot to the rear with the heel raised, almost as though the goddess were walking. The knees and ankle-bones are perhaps somewhat too pronounced, but the modelling in general is good. The lines of the groin are rather brutally and crudely marked. Seen from the front, the Venus, though not a work of the first order, is well and conscientiously executed; the sculptor has appreciated the graceful and sinuous curves of the standing figure and its fully and firmly rounded limbs. Seen from the side, however, the statue loses most of its grace, and the back view is almost ugly. It must have been designed to stand in some niche, which afforded only a front view. The dolphin, as is evidenced by a hole behind to receive a lead pipe, served as a fountain. The little Cupid is perhaps the most successful part of the group. Like the Venus of Medici, with which it agrees in having the attributes of the dolphin and the Cupid, this statue represents the school of Praxiteles at its end and that of Lycurgus at its beginning. The author closes his article by comparing several other Venuses of this type such as those of Naples, Dresden, Florence, and Cyrene, referring for these to the Repertoire of S. Reinach.

### SPAIN

New Cave Drawings in Spain.—In The Illustrated London News, May 25, 1935, pp. 922–923, there is a brief description of some Palaeolithic cave drawings and paintings recently discovered by Don Juan Cabré Aguiló, Director of the Cerralbo Museum in Madrid. These new ex-

amples of early art were found during an investigation of the Caves of Los Casares and La Hoz in the inland Province of Guadalajara. A great many animals are represented and some anthropomorphic figures. One of the most interesting scenes pictures two of these figures fishing. The drawings are to be dated in the Aurignacian and Solutrean periods, 30,000 to 25,000 B.C.

# CHRISTIAN, BYZANTINE AND MEDIAEVAL

### SIAM

Hātim of the Tribe of Tāi in a Siamese Myth. -R. Dangel (Studi e Materiali di Storia delle Religioni, x, 1934, pp. 205-222) points out that the Hātim Tā'i who appears so often in the legends of the Islamitic peoples is the historic character of the knight and poet of the same name who lived in the last half of the sixth and beginning of the seventh century and who became a byword for his generosity. With Islam this Islamitic Arabian made a triumphal journey through Iran, Turkestan, and northern India. His renown penetrated as far as Siam, where he is recognizable as the hero of the nine tales of the "Tales of the Justice of the Iranian Kings." This collection of tales goes back to a Persian text compiled in northern India which reached Siam in the seventeenth or perhaps even in the sixteenth century. The author gives a summary of these tales and traces their previous development in which the poet-knight of the early Arabian accounts in the late versions is eventually represented as a mighty ruler.

### CHINA

Possible Chinese Origin of the "Animal Style." - The third and last article on the discoveries in a Chinese Tomb, known as the "Elephant" Tomb, found near the site of An-yang, the capital of the Shang-Yin dynasty, by the Rt. REV. WILLIAM C. White, Professor of Chinese Archaeology in the University of Toronto and Keeper of the East Asiatic Collection of the Royal Ontario Museum, is printed in The Illustrated London News, May 18. 1935, pp. 888-889, and p. LV of the colored plates. In this article Bishop White discusses the style of the objects found. Owing to the predominance of animal motives, the finds are generally classified as being of the "Animal Style." The former designation of objects of this type was "so-called Scythian." Since the style is no longer confined to the region of ancient Scythia, the present terminology is more appropriate. One

characteristic of the Animal Style is the use of gold and silver for ornament, and inlay of semiprecious stones, such as turquoise. The origin of this style is a problem, since the excellence of the work of the best period presupposes a long development. The objects from the "Elephant" Tomb, which can be dated in the twelfth century B.C., are of the earliest period of the style, formerly considered to be Scythian. This rather points to a Chinese origin, a theory which might be confirmed by the fact that the fully developed style occurs in China several hundred years earlier than in the West. There may well be a still earlier source, since parallels for the style have recently been found at Ur.

Germanic Animal Ornament.-"Style I" in this category belongs to the first half of the sixth century A.D. and to Scandinavia, where there had been forerunners since the fourth century. So much is agreed; but some authorities find the origins of the style in provincial Roman work, some in the Orient. Striking analogies exist in both fields. The Scythian animal style in southern Russia preceded the Scandinavian by 500 years. The Goths came in contact with the later "polychrome style" of that region, and did transmit some features to the west, but they are insignificant in the Scandinavian style. In west Siberian archaeology little is certain, but apparently the corresponding things there belong to the beginning of the Christian era and are too early to influence Scandinavia; also there are considerable differences in style, and no probable route of transmission can be found. The last objection applies also to the hypothesis of influence from an unknown center in the farther east. Since no variation of the oriental theory seems to be acceptable, Roman origin is to be preferred. (W. von Jenny, Arch. Anz., 1934, pp. 296-312.)

## ROME

Diptych with Poet and Muse. - K. WEITZMANN and S. Schultz (Jb. Arch. I. xlix, 1934, pp. 128-138) find that this ivory, at Monza, is similar in style to the diptych of Stilicho and Serena, dated 390-400, not to later ivories. The Stilicho piece was probably made in the vicinity of Milan, as were others related to it, including that with poet and muse. The style shows a renaissance of the classical. The poet is evidently portrayed from life. He should be Claudius Claudianus, who suits in time and place, looked back in his poetry to the past, and, being an official, might well issue a

diptych. Neither Boethius nor Ausonius meets the requirements.

#### SYRIA

Kal'at Sim'an. - DANIEL KRENCKER argues that the central octagon of this great church, built 460-490, was roofed, or at least that it was intended to roof it (Jb. Arch. I. xlix, 1934, pp. 62-89, 34 figs.). It would be then a single great cruciform church. Windows and doors of each of the four arms are treated as in normal closed buildings, except on the ends toward the octagon; there, there were archways with no original provision for closing them. In the case of the chief (east) arm the archways were later closed with latticework and still later with walls. They were not originally closed with leather curtains because the hangings would be too heavy, and there are no traces of fastenings for them. The walls of the octagon were enriched with marble slabs, proper to an interior. Atop these walls was a cornice carried by heavy consoles, like that on the outside of the large apse and elsewhere; but fair analogies occur in interiors also. Krencker discovered on the site unmistakable remains of arched windows, 4.40 m. wide, which are too large for the pediments restored by Butler and can belong only to the upper part of the walls of the octagon. Such openings imply a roof, which would be wood. The small apsidal rooms opening off the octagon between the four great arms had windows, though if the octagon were open the rooms would be well lighted from it. Evagrius, writing in the sixth century, clearly describes the octagon as open; evidently it had not been completed as planned or the roof had been destroyed, perhaps by earthquake, and not rebuilt. Schlumberger, Zschietzschmann and others who visited the site with Krencker were convinced by him. The hexagonal court at Baalbek may well have been roofed as a Christian church.

A. GUYER (ibid., pp. 90-96) upholds the usual view that the octagon was unroofed. He stresses the cornice and other ornament of the octagon, proper to an exterior, and places Krencker's windows as lunettes in the pediments. The apsidal rooms would be windowless in the fourth century and would have windows in the second half of the fifth, regardless in both cases of any roof for the octagon. The four arms are separate buildings; the whole is not a unity, as genuine cruciform churches are, and does not belong to their line of development; though its influence may have been felt in the cathedral at Pisa.

# THE UNITED STATES, CENTRAL AND SOUTH AMERICA

Taikomol and Marumda, Two Californian Creators. - Through the work of A. L. KROEBER. EDWIN LOEB, and JAIME DE ANGULO, in the last few years two figures have emerged from the semi-darkness of insufficient evidence: Taikomol. the world creator of the Yuki and Huchnom (on the middle Eel River and south Eel River), and Marumda, who plays the same rôle among the eastern Pomo (in the region of Clear Lake), RICH-ARD DANGEL, in Studi e Materiali di Storia delle Religioni x, 1934, pp. 80-94, has made an analysis of the myths concerning these two under the following headings: Creation Myths of the Yuki, Creation Myths of the East Pomo, Originality of Material, Christian Influence, the Ghost Dance Movement, Shamanism, the Creator and the Dance House, Influence of the Conception of the World, Creator and Hero, Creator and Myth, the Creator's Activity, the Personality of the Creator. Taikomol and Marumda, he concludes, are not gods of the highest order, nor can one detect in them the features of an ancient heavenly deity, as in the case of Olelbis and Gudatrigakwitl. Taikomol is only one of the wanderers so prevalent in the cosmogony of the northwest coast, and Marumda is only one of the numerous supernatural beings of the Pomo.

Population of New Mexico in Post-Glacial Times.—The University Museum and the Academy of Natural Sciences, both of Philadelphia, together with the Carnegie Institution of Washington, continued during the summer of 1934 the work which, for several years, has been carried out under the direction of Mr. Edgar B. Howard, of attempting to solve the problems connected with the people who apparently lived in the region of present-day New Mexico during early post-glacial times.

The work during 1934 was largely of a geological nature, though part of the time was spent in an unfinished excavation of a cave near the point of the Guadalupe Mountains, from which several infant cradle-burials were removed. Several feet below this a layer of dung was encountered, which seems to be that of the Ground Sloth, although definite identification is waiting upon further microscopic examination. The small trench which revealed this layer showed no association with human remains, unless a large pine log, burned at one end, and which extended

in and below the dung layer, is possibly due to man's presence there at the time of the sloth. Further work will have to be done before this can be proved one way or the other.

The geological study of old beach lines, basin deposits, and terraces seems to furnish evidence that there was a Pluvial Period in the regions covered.

Piedras Negras, Guatemala. - The fourth expedition of the University Museum, Philadelphia, to Piedras Negras under the direction of MR. LINTON SATTERTHWAITE, JR., was in the field for three months during 1934. Excavations were confined to digging trenches in three mounds, with results of considerable use in reconstructing the architectural history of the city. Studies of several mounds as found, without excavation, proved highly informative and resulted, among other things, in identifying a new type of palace. Under this head belongs also the careful reëxamination of the unique building, P-7, excavated in 1931. Altogether, the season resulted in identifying four types of buildings previously unknown at Piedras Negras. Of these, apparently three include important features heretofore unknown in the Maya area: the woodenroofed portico, the roof combining stone vaulting and flat beam-supported concrete roof, and the altar niche especially ventilated to carry off the smoke of the altar fire.

A two weeks' trip to the neighboring city of Yaxchilan provided a large amount of architectural data on the buildings there. A very interesting site, previously unknown to science, was visited on the return journey, and named El Cavo II.

Archaeological Survey of Venezuela. - MR. VINCENZO M. PETRULLO, field director for South American research of the University Museum. Philadelphia, completed in April, 1934, a nine months' survey of the archaeological and ethnological problems and opportunities offered by Venezuela. Scientific research in Venezuela was found to be receiving the enthusiastic support of the government and the people at large. Mr. Petrullo spent a considerable period in a field study of a tribe called the Yaruros, known heretofore by name but never studied before. These people, who are nomads, roaming over the extensive plains of Apuré, between the Apuré and Meta rivers (both of which are tributaries of the Orinoco), resent the gradual occupation of their territory by outsiders, and friendly contact

is difficult to achieve. However, a series of extraordinary events led up to Mr. Petrullo being accepted by the Yaruros as one of themselves. This breaking down of the usual reserve made it possible to observe and study intimately the social organization and religion of the tribe. In

addition to the information thus obtained, Mr. Petrullo brought back with him to the University Museum a representative collection of objects made and used by the Yaruros in their daily life and on ceremonial occasions. (University Museum Bulletin, Vol. v, No. 3, May, 1934.)

# NEWS ITEMS FROM ATHENS

The discoveries in June, 1935, during the excavations for a new Yacht Club on the point dominating the small harbor of Tourkolimani, the port of Munychia, which led to the conjecture that this harbor was the original port of Athens, the ancient Phaleron, received a great deal of publicity in the Athenian newspapers. The hill itself was identified as the ancient Alope and the islet Koumoundouros as the island of Patroklos; but the excavations have so far not laid bare the sanctuaries of Demeter, Athena Skiras, and Zeus, nor the several altars mentioned by Pausanias (I, 1, 2-4). They have, however, revealed the very fine walls of Konon's fortification and just within them a semicircular tower of beautiful fifth century construction. In both the fifth and fourth centuries the hill must have been a fort, since the walls appear to have gone entirely around it. On the little island, early sherds and obsidian have been noted and there are early graves, but no excavations have yet been undertaken.

In the church at Daphni a very fine mosaic representing the "Platytera ton Ouranon," or the Madonna Greater than the Heavens, holding the infant Christ has been rediscovered. This figure occurs in virtually all Byzantine churches in the apse above the altar. The mosaic was mentioned by Lambakis in a report in 1885, at which time he stated that torrential rains had destroyed its upper part. Since then no one had seen even the lower portion, and it was thought to have wholly perished. It appears, however, that the specialist, Novo, who was engaged in cleaning and repairing the mosaics, had covered the figure with cloth, preparatory to removing and resetting the tesserae, when the funds for the restoration gave out in 1896. For forty years the figure was concealed beneath the cloth which quickly became coated with dust, resembling the plaster on the adjacent walls. The Ephor, Mr. Xyngopoulos, in the course of investigations in the spring of 1935 found the cloth and the figure behind it. The right shoulder, neck and head of the Theotokos have been destroyed, as well as the upper part of the body of the child.

At the annual meeting of the Greek Archaeological Society held March 31, 1935, the Secretary, Dr. Oikonomos, gave a report of the excavations

carried out under the auspices of the Society in 1934. These included the work at Marathon of Professor Sotiriadis, whose discovery of the Mycenaean beehive tomb with its cist graves has already been reported, together with the finding of a cemetery of the Geometric Period with its separate section for children's graves. Professor Sotiriadis has also discovered on the summit of Mount Agrieliki, which lies to the left of the road near the thirty-fifth kilometer post as one comes from Athens, an ancient altar, on a rounded jut a little below the Mycenaean acropolis. The huge stones of the altar have been overturned by shepherds or by treasure-seekers, but a great quantity of sherds and some small, complete vases dating from early Geometric down to Roman times were collected by Professor Sotiriadis. The upper section of an ancient road, cut in the rock and leading to the altar was also found. The road had been well laid out to make use of the natural slope, rising in a gentle incline, thus enabling a sacred procession to reach the sanctuary.

The Society also carried out excavations at Megara under the direction of Messrs. Threpsiades and Travlos. As the modern town lies directly above the ancient city, their investigations were confined to three points. The first is at the entrance to the town, opposite the little church of the Theotokos, where they uncovered the foundations of a great building, consisting of many large rooms, the plan of which resembles that of Hellenistic or Roman houses. Some of the rooms appear to have been added at a later date, and the latest period of occupation must certainly fall in Christian times, perhaps in the fourth or fifth century A.D. Not far from this building was found a piece of the circuit wall of the ancient city, about 14 m. in length, built of large blocks of tufa. The second area investigated is on the hill, Alkathoos, where there is preserved, cut in the rock, almost the entire outline of an ancient temple. This temple was peripteral, measuring 14.50 m. by 35.50 m. On the site itself nothing but the bare rock remains, but sherds and figurines dating from the seventh century were found on the slope below. The excavators consider this the temple of Athena mentioned by Pausanias (I, 42. 4), which contained the gold and ivory statue. The third area of excavation lies within the

mediaeval fortress. Trial trenches here produced sherds of all periods: Early Helladic, Middle Helladic, Late Mycenaean, Geometric, Early Attic black-figured, red-figured, Hellenistic, Roman and Byzantine, attesting the uninterrupted occupation of the site from the third millennium B.c. Unfortunately these sherds came from a disturbed area, and it was only in a trench on the west slope of the hill that an unmixed stratum of Middle Helladic was found. This latter contained also an infant's cist grave, 0.40 by 0.37 m. and 0.26 m. deep, and farther on another child's grave

In the course of his work in 1934, Professor Orlandos cleared a considerable part of the building to which belonged the propylon discovered in the preceding year. The dimensions of this structure, 35 by 65 m., and its arrangement and setting led Mr. Orlandos to identify it as the gymnasium mentioned by Pausanias (II, 10, 6). It was built on two levels, with a great retaining wall, 36.40 m. long, holding up the lower terrace. This latter wall is constructed of large blocks which have their outer faces cut in a convex curve, in "cushion finish (Fig. 1)." The building itself, so far as yet



Fig. 1.—Sikyon. The Northern Retaining Wall of the Gymnasium Showing the "Cushion Finish" of the Blocks

Courtesy of Mr. Orlandos

built of roughly cut slabs. A small Geometric pot gives the date of these tombs.

At Sikyon Professor Orlandos carried out another campaign of excavation, and also repaired and reconstructed, where necessary, for use as a museum, the fine Roman brick building, the so-called Praetorium, which is, in reality, a Bath. The walls of this building were preserved to a considerable height, and as it had several rooms with arched doorways and large square windows, it has been possible to adapt it very successfully to its new purpose. Since work on the building is still in progress, the architectural pieces and small objects from the earlier campaigns are in temporary quarters in a house in the village of Vasiliko.

excavated, seems to comprise two long colonnades set at right angles to each other, one on the north and one on the east, facing an enclosed court on the lower terrace. Each colonnade was backed by a series of chambers. From the architectural remains recovered it appears that the eastern stoa was of the Ionic order. A column drum, capital and geison of the Doric order found in the western part of the upper terrace lead one to believe that the upper portico was of the Doric order. The terracotta architectural fragments found two years ago, namely simas, lion-heads and tiles, which show an original method for fastening the cover-tiles, also belong to this colonnade. Work in this region uncovered a second fountain, placed

symmetrically with reference to the one previously discovered and to the flight of steps between them (Fig. 2). In its architecture the new fountain differs completely from the former. The water entered through a round opening set along the axis of the building at a height of 1.50 m. above the floor. The water was stored in an open basin in front with two vaulted reservoirs running perpendicularly to it behind. The walls and the vaults of the two reservoirs as well as those of the fountain itself were covered with a thick durable coating of marble stucco on which traces of painted decoration could be distinguished. On the

buildings on the lower terrace. Since the whole town was laid out at one time, its plan and the details of construction of the various buildings should add valuable information to our knowledge of Hellenistic architecture. The theatre and the stadium were partially excavated by the American school in 1886, 1887 and 1891, but further work in these areas would no doubt be profitable.

The excavations at Amnisos in Crete were continued under the direction of the Ephor, Mr. Marinatos. They were restricted in 1934 to an investigation of the Greek sanctuary discovered above a Minoan building. The excavation was



Fig. 2.—Sikyon, Fountain B (Courtesy of Mr. Orlandos)

wall of the façade, above the intake, is a rectangular niche with little pilasters on each side which supported the small Doric entablature found in the interior of the basin. This niche may have contained a statue of the nymph of the fountain.

It is unfortunate that the funds available from the Greek Archaeological Society for Professor Orlandos' excavations are so scanty, for the site of Sikyon would clearly repay excavating on an extensive scale. The ruins of the city founded by Demetrios Poliorketes in 303 B.C. are very considerable and scattered over a wide area. Portions of the circuit wall still exist in many places as well as the theatre and the stadium on the upper terrace and the city with its houses and public extended toward the south and brought to light a new section of the sanctuary which appears to have suffered less disturbance than the other portion. Since the lowest level here contained sherds of early Geometric, Geometric and Orientalizing wares, the continuity of the cult in this sanctuary from Early Geometric to late Roman times is established. A layer of sand separates the Geometric layer from the Minoan; and since the Geometric layer in some places is found within the Minoan building, it would appear that the walls of the earlier edifice had been reused for the later sanctuary. The early Greek layer, which is characterized by its black earth, produced a great mass of bronze débris, also two small bronze oxen,



Fig. 3.—Troy. Pots on Floor, Troy II Square E 6

a bronze seal-ring with a design of a reclining quadruped on the bezel, a double axe badly damaged, bronze vessels with lion's feet, and an incomplete, nude female figurine, together with a bronze coin. The close connection which existed between this sanctuary at Amnisos and Egypt is attested by the finding of many objects of Egyptian faïence, including two little seated figures, badly damaged, but bearing hieroglyphic inscriptions, fragments of standing figures, heads of

gods, the upper half of a figure with a lion's head, perhaps representing the Memphite deity Sekhmet, a small gold disc and a var .ety of beads of different materials. The Roman level here also bears witness to the close relations with Egypt, for in it were found a falcon of poros, larger than life size, a fragment of the head of another falcon with inset eyes, part of a bull's head in poros, fragments of birds' and lions' feet joined to Ionic capitals of poros, and a small marble head, perhaps that of Pluto-Osiris. Three fragments of a marble vessel which join together

give the last words of a two line inscription in Greek. Many terracotta lamps with the signature of Klaros were recovered; their decoration recalls the scenes on Minoan gems, leading the excavator to believe that the potter had before him some sealstones of the earlier epoch which had accidentally come to light.

A fourth campaign of excavations at Troy was conducted by the University of Cincinnati expedition during April, May, and June, 1935. At the northern edge of the hill, in squares C 2–3, where a vast amount of débris from Schliemann's excavation had first been removed, an extensive area of undisturbed deposit belonging to Troy I was carefully examined. Considerable remains of at least three houses of this period were revealed, well enough preserved to allow their rectangular plans to be determined. On the floors were found quantities of shattered pottery, implements of bone and stone, a figurine of terracotta and one of marble. Three infant burials also came to light, one beneath a floor and two outside a house.

In the central part of the site, the excavation of the "island" in square E 6 was continued and at the conclusion of the campaign the level of the nearby threshold block of the propylon giving access to the court of the Second City megaron had been reached. In this layer, presumably assignable to Troy II, a complex of small chambers was uncovered, perhaps storerooms connected with the megaron itself (Fig. 3), since the floors showed little of the usual débris of habitation. The chambers contained quantities of pottery: at least 170 vases were listed, some intact, but the majority crushed and broken, varying in size from small cups to large pithoi.



Fig. 4.—Troy. House VI F. Floor with Column Bases from Northeast



FIG. 5.—TROY. HOUSE VI G FROM NORTHEAST

Among the other objects recovered here may be mentioned a good many small beads of gold of different shapes, numerous spindle whorls or buttons, and a large collection of loom-weights of unbaked clay.

On the south side of the hill a great quantity of earth from earlier excavations was carried away and a large area within the south gate of Troy VI was cleared down to the pre-classical layers. The Hellénistic and Roman buildings which had stood in this quarter had been completely demolished, perhaps in a disastrous earthquake, and much of their marble material had apparently been used in mediaeval times to make lime. Virtually the whole of the Hellenistic and Roman layer on this side had thus been utterly destroyed. Excavations proceeded inward from the Gate, and on each side of the roadway a house belonging to VIIa was cleared. That to the right yielded a good many vases in a room containing a hearth, an oven, a millstone, grinders, etc., which had perhaps served as a kitchen. The house had been gutted by a fire so intense that the inner face of the wall was badly calcined. The house on the left, which furnished relatively little pottery, had been succeeded in VIIb by a structure on the floor of which a great deal of Buckelkeramik was brought to light. Farther to the north a huge rectangular well was encountered: it was lined with a carefully built stone wall in which, at a depth of ca. 3 m., appeared deep grooves for heavy horizontal wooden beams. At 3.90 m. below the datum the bottom of the well had not yet been reached. The débris filling it contained masses of Hellenistic potsherds, but the date of the original construction of the well is still to be determined. Just beyond it toward the north was found a delicately

fashioned ornament of gold, perhaps an earring, in the form of a serpent.

Farther to the west digging was continued in squares F 8 and F 9; in the former some rooms of a house of Troy V, with oven, hearths and not a little pottery, were cleared; in the latter, the stratification of the deeper layers of Troy VI was examined. On the eastern side of the citadel the excavation of House VI F with its two rows of column bases was completed (Fig. 4); and Houses VI E and VI G (Fig. 5) were further

explored. At the same time the task of clearing the broad area between House VI E and the Sixth City wall was begun.

At the extreme northwestern angle of the citadel the finished end of the city wall of VI discovered in 1934 was completely exposed (Fig. 6) and a further extensive area was cleared in a search for a possible continuation of the wall. The end revealed was presumably one side of a gate, although the further course of the wall has



Fig. 6.—Troy. End of VIth City Wall in Square A 5

not yet been found. Deep digging in this area finally revealed the cause of the disturbance dating from Hellenistic times which had been observed during the campaign of 1934. As now apparent, it was at this point that the wall of Hellenistic Ilion, enclosing the lower town on the plateau toward the south, came up the hill to join the wall around the acropolis. A portion of the Hellenistic wall, admirably built to a great depth of well-cut blocks of limestone, was discovered still in place, ascending the slope. An area of stratified deposit of Troy VI and V, untouched by the Hellenistic builders, yielded a useful

this wall stands the base of a monument with foundations of limestone and a stepped superstructure of marble, this also of Hellenistic date. It is gradually becoming clear that the Hellenistic elements in Troy IX have been much underestimated, and that the town of that date was of much greater importance and extent than hitherto recognized.

Outside the citadel explorations were continued in the search for further cemeteries. At the extreme eastern edge of the plateau, not far from the village of Hissarlik, a Roman necropolis was found, and here, too, were uncovered the remains



Fig. 7.—Troy. Base of Monument and Hellenistic Wall in Square A 8, VIth City Wall in Background

ceramic series, containing some choice fragments of imported Mycenaean ware of Late Helladic I.

In square A 8 a broad cutting was begun in order to lay bare the exterior of the Sixth City wall outside Gate VI U, which Dörpfeld recognized as a Gate, although it had been closed again by a later wall. Just outside the wall, however, a magnificent Hellenistic wall was brought to light, completely masking the earlier structure behind it (Fig. 7). The Hellenistic wall, built of handsomely squared blocks of limestone with drafted edges, still stands to a height of ten courses. Whether it is part of the fortification or belonged to a large edifice of some kind has not yet been determined. A short distance to the southwest of

of a large building with floors of mosaic. In one long room, resembling a narthex, the panelled mosaics were well preserved, with a short Greek inscription in a framed rectangle, the text of which suggests that the building was religious in character.

On the far southwestern slope of the plateau extensive deposits of Troy VI were encountered along with the remnants of a structure in crude brick and great quantities of pottery. It was not possible to ascertain definitely the meaning of these remains, although they may perhaps mark a place of incineration.

ATHENS, GREECE

ELIZABETH PIERCE BLEGEN

# **BOOK REVIEWS**

Classification du Néolithique Lacustre Suisse, by Paul Vouga. Commission neuchâteloise d'archéologie préhistorique. Extrait de l'Indicateur des Antiquités Suisses, 1929, Nos. 2 and 3. Pp. 1–29, pls. 7, figs. in text 11. Paris, Geuthner, 1934. 25 frs.

The author made his first "Essai de classification du néolithique lacustre d'après la stratification" in 1920 (publ. in Indicateur des Antiquités suisses and in Archives suisses d'Anthropologie générale). He does not pretend that even the present study is more than a summary of the results thus far achieved. Enough is now known to make it possible to divide the Neolithic of the Swiss pile-village era into two great periods, representing two distinct cultures. The archaic period (early Neolithic) is represented, as far as at present known, by a single layer; whereas the recent period (middle and upper Neolithic and Eneolithic) often covers as many as three successive occupations at one and the same site.

The objects which the two periods have in common are essentially those made of horn and bone. The same is true of the stone ax, all types of which coexist throughout the two periods. The elements which separate the periods and successive occupations are furnished by the deerhorn sockets for axes, the patina, the form and decoration of the pottery, the nature and form of the flint implements.

The author points out that the early Neolithic always occurs on the primitive lacustrine chalk and is always separated from the more recent archaeological level by a thick layer of clay sand—index of a submergence of long duration. The piles are not split and have an average diameter of a dozen cm. They are so much worn by the sand deposit that they seldom show above it.

One of the surprising features about the early Neolithic is the high-grade character of the ceramic art. It might easily be mistaken for that of the Bronze Age. It includes a much greater variety of types than does that of the middle Neolithic which followed. One of the characteristic implements of the early period is the double point of bone from 5 to 13 cm. long. Among the objects not found in the early Neolithic are the spindle whorl, which abounds in the later levels, the hammer ax of stone and the flint sickle.

The middle Neolithic is what the early prehistorians called the "bel âge de la pierre." Nearly all the objects illustrated in manuals of prehistory are of this phase, which was apparently the longest. The deerhorn sockets have a pronounced shoulder. All the flint implements are made from nodules of opaque indigenous Jurassic flint. The pottery is of a poor quality of paste and not well baked. Practically all the middle Neolithic types persist through the upper Neolithic and into the Eneolithic.

One distinctly upper Neolithic element is the lozenge-shaped polished hammer ax of stone. The pottery is of a better quality than is that of the middle Neolithic and progress is to be noted in the making of arrowheads. During the Eneolithic, flint implements were for the most part imported from Grand Pressigny in France. The pottery is well baked. The great innovation of the Eneolithic was the beginning of a metal industry.

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LE NÉOLITHIQUE LACUSTRE ANCIEN. Receuil de travaux publiés par la Faculté des Lettres. Université de Neuchâtel, by Paul Vouga, Professeur à l'Université. Pp. 74, 24 pls. Paris, Geuthner, 1934. 35 frs.

Although explorations of Swiss lake dwellings were begun three-fourths of a century ago, nothing was known of the oldest period of Swiss pilevillage culture until the discoveries at Auvernier in 1920. Since then the existence of this old Neolithic culture has been verified through excavations at additional sites as follows: (1) Cortaillod and Saint-Aubin (Port-Conty); also (2) through specimens previously found at Thielle, Préfargier, Saint-Blaise, Bevaix and Chez-le-Bart.

The finds are inventoried under six heads: (1) flint, (2) stone, (3) bone and horn, (4) wood and vegetable fibre, (5) ceramics, and (6) articles of adornment and toilet objects. During this old epoch of the Neolithic, flint was little used and little is known of the original supply. Stone was utilized in many ways. As for bone, most of the long bones had been broken for the marrow; the bone fragments were often converted into tools. Deerhorn was employed in many ways. Wood and vegetable fibre decay easily, even when protected

in lake beds. However, enough has been preserved to give an idea of the extent to which both were employed.

The richness of form and the technique of early Neolithic pottery is surprising when compared with the pottery of the middle Neolithic. The early Neolithic is particularly rich in objects of adornment and of the toilet. The race responsible for the early Neolithic culture seems to have been dolichocephalic.

The author concludes that, while there was no hiatus between the middle and upper Neolithic and the Eneolithic which followed, profound divergences separate these from the early Neolithic. Many of the objects dating from this early epoch are not carried over into the epochs which follow. However, there are certain traits in common, such as (1) pile-village construction, (2) presence of the dog, ox, pig, goat and sheep, (3) axes of hard stone, not of flint, (4) hafting of the axes by the intermediary of the deerhorn sheath or socket, (5) undecorated pottery.

The admirable series of plates add much to the value of this work.

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Palestine and Israel: Historical Notes, by Sir Flinders Petrie. Pp. x+99, 15 pls. London, Society for Promoting Christian Knowledge (in America, The Macmillan Company), 1934. \$1.60.

I suppose that a distinguished octogenarian with a long record of solid archaeological work behind him needs no special apology for a more or less fanciful fling at historical interpretation. In the case of Flinders Petrie we have been long aware of his chronological idiosyncrasies and his favorite ethnic theories. The present study is of a piece with the author's earlier works when it informs us, e.g., that the Canaanites came from the Caucasus to found the VIIth dynasty of Egypt at 3127 B.C., and that the Hyksos founded the XVth dynasty at 2375 B.C. (Chapter I, and especially p. 96). The book closes with an appeal for funds to continue the search for the Amorites.

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FOUILLES DE TELLOH: TOME I, ÉPOQUES PRÉ-SARGONIQUES, by H. de Genouillac. Pp. xii+106, 97 pls. Paris, Geuthner, 1934. Price (for tomes I and II), 300 fr.

The Sumerian Question has developed manifestly into something of a menace: Near Eastern archaeologists do not seem to be able to get away from it. When the problem of the relative antiquity of the Sumerians was first reopened in recent years, after a lapse of some two decades, the revived interest was a perfectly natural outgrowth of latest archaeological researches and, specifically, of penetrating into the prehistoric deposits of Mesopotamia. Arguments and counterarguments were hurled back and forth and, when the excitement had subsided, it was found that the question was still far from a satisfactory solution. To be sure, the lively dispute did not prove entirely gratuitous. We have gained from it a better appreciation of the acuteness of the problem as such and of its vital historical implications. Those who used to accept the priority of the Sumerians as a matter of course are no longer likely to regard such a view as axiomatic. It should be clear, however, that for the present the discussions have reached an impasse that should not be disturbed without fresh evidence of a decisive nature, as happens to be the case in the present volume by de Genouillac.

I am fully aware that I have placed myself herewith in the position of the dweller in a glass house. My strictures may appear doubly strange to those who have realized that the genial Abbé is in essential agreement with myself as to the serious weaknesses of Frankfort's theory of Sumerian continuity throughout the prehistoric periods of Lower Mesopotamia. I wish to make it clear, therefore, at the outset that my quarrel with the author does not concern his views on the subject, but rather the place and prominence which he has accorded them. His book should be primarily an exhaustive account of recent excavations at Telloh, and only secondarily a discussion of their possible historical significance. Instead, the logical order (as suggested by the title) has been reversed, and the emphasis is thus misplaced.

The first chapter is entitled "Telloh et le problème Sumérien, particuliérement a l'époque de la poterie peinte." This amounts to putting the cart before the horse. It will be readily granted that Telloh (ancient Lagash) has a right to a vote in the matter, by reason of its preëminent position in early Sumerian studies. It is to Lagash that we owe many representative examples of Sumerian literary genius and some of the finest products of Sumerian art. Few would begrudge the site the distinction of settling once and for all the problem

of Sumerian origins. But the vital clues are not available as yet, nor does the new evidence add materially to the results obtained at Warka, Ur. and other settlements of comparable antiquity. At best, the subject might call for a separate presentation along the lines of Frankfort's Archeology and the Sumerian Problem. In a definitive archaeological report there may be room for it in a concluding chapter; as a leitmotif it is scarcely appropriate.

Chapter II presents the material of the Warka period at Telloh. The terminology is de Genouillac's. The reader would have preferred an independent Telloh stratification aided by a comparative table with special reference to Warka chronology. Unfortunately, the excavators have little architectural material to record and are thus without primary stratigraphic evidence. It is plain, however, that the comparison with Warka IV and V is on the whole justified. The last chapter discusses the remains of the Early Dynastic period.

The illustrations are not accompanied by an index. To learn the details about a given illustrated object the reader must engage in a lengthy exploration of the text. Let us hope that the next volume will be more practically arranged.

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ÉCOLE FRANÇAISE D'ATHÈNES. EXPLORATION DE Délos, No. 15. Les Vases Prehelléniques ET GÉOMÉTRIQUES, by Charles Dugas and Constantin Rhomaios. Pp. 114, pls. 56, figs. in text 7. Paris, Boccard, 1934.

This publication results from a happy decision to include the vases from Rheneia (at Mykonos) with the dispersed pottery found by the French in Delos. It is fittingly dedicated to the memory of the discoverer of the Trench of the Purification,

Stavropoullos.

The "Prehellenic" vases of this fascicle are few and not remarkable; the Geometric open a new phase of Cycladic studies; instead of a loophole view of the Geometric yield of Delos, we have a panorama. In this the most important disclosures are: a wealth of early material on which the student of origins and differentiation will seize eagerly, including a Protogeometric series with a Geometric sequel; two groups of marked peculiarity (Ad, and the main run of Bb), so incompletely known before that in their full muster they can count as novelties; and certain interesting voids. "Melian" Geometric, like Theran, is absent; it is more remarkable that not more than two or three vases (Pl. 53 A, 9; Pl. 17, 195; Pl. 53. A, 20?) fit easily into the main class of early Cycladic pottery, the "Euboic." The last is the observation of the reviewer, not to be fathered on the authors, who, like Buschor in his theory of the Parian origin of "Euboic" (Ath. Mitt., 1929, 144-146), minimize the gap between the characteristic vases and Pfuhl's "Sondergruppe" (Ath. Mitt., 1903, 187).

The plates are marvelously good, the descriptions almost always minute enough; the introductions to the sections of the catalogue are dexterous and full of candid scholarship. As the familiar potteries, with a home and name, are not abundant at Delos, in classification the authors had a very hard, partly baffling task. Even after Buschor's orientative "Kykladisches" (Ath. Mitt., 1929, 142 ff.), the Cycladic potteries have no map, and Dugas' own candor has withdrawn the alternative to a geographic classification which he elaborated in Céramique des Cyclades. The arrangement now offered is not essentially different, but is more definitely adapted to the vases of Delos, without being less comprehensive, and it has a safer terminology. The previous division into "géométrique insulaire" and "géométrique argivo-cycladique" is superseded by a nearly equivalent distinction according to surface -Class A with dressing ("enduit"), Class B with slip. The main body of the A group is in the Ab subdivision; Aa takes the precursors, Ac the "Atticizing" vases, Ad Buschor's tentative "Siphnian," Ae the skyphoi, Af the plates. Ba corresponds with Theran; "Delian" (Payne) or "Naxian" (Buschor) is split between Bb and Bc, the latter a compartment for Atticizers. It is claimed, rightly, that this is a convenient scheme; not so justly, that it begs no questions. A coherence not self-evident is assumed when the place of most vases with metopic shoulder-ornament is indicated to be with the "Euboic" amphoras in one solid class (Ab), assigned apparently to a single island (pp. 28 f.). Vases like Pl. 16, 12, Pl. 17, 13, with their peculiar syntax, are troublesome. But separatist criticism of this grouping is not for the distant student, who can only promise his cheers to any essay in preciser correlation, after Buschor's example (op. cit., p. 145). Elsewhere, the authors are led on to debatable ground by their Dipylocentric bias, more conspicuous than in the abandoned classification; for of Pelo-

ponnesian influence we no longer hear, the "argivo-cycladique" category having been sacrificed to Payne's censure, which was justified, if too tart and even perhaps too sweeping. For the hypothesis of Atticism there is much to say (Céramique des Cyclades, pp. 137, 146-148), but it raises perplexing questions. Perhaps it would be an ad hominem quibble to turn upon Dugas his admission that much of the matter of this Atticizing manner is Cycladic by origin (op. cit., p. 147). But touching the discovery of Atticism in motives, can we assert that Attica is the only possible origin of the quadrupeds, rows of birds, choirs, and of the "Atticizing" filling-ornament, without clearer light than we now have on the later stages of oriental geometric (not to be injected rashly here, but its quadrupeds and bird-processions deserve attention), and on the relation of Attic to Argive and to the "Melian" kraters and stands? The authors are at pains to document their view, but the effect of their comparisons is not very strongly persuasive, often because their own knowledge and candor cite corrective examples or opinions. Their discussion of the fine krater Bc 8 (Pl. 44), prima facie the most Atticizing of all the vases from Delos, especially concerns the American student, because the pieces most comparable are in the Metropolitan Museum (Myres, Handbook of the Cesnola Collection, 1701 and 1702, figures). It is most important that European scholars should know that the New York krater and oinochoe are not Attic, their slipped technique being precisely that of Bc 8 as Dugas describes it. This not only bars Dugas' appeal to the New York krater (p. 85, note 5) in the case of a congener of Be 8, but it should take something from the confidence expressed elsewhere in the natively Attic character of the octofoil, the deer with crumpled legs, the row of grazing horses. And the quality of the New York krater certainly raises the question: influenced, or influential? These three vases are far from justifying romantic speculations about a lost "creditor-pottery," but they encourage an open mind, for the present, about the originality of the rich phase in Attic Geometric.

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Untersuchungen an Griechischen Theatern, by Heinrich Bulle with plans and drawings by Heinrich Wirsing and contributions by K. Lehmann-Hartleben, H. Möbius, and W. Wrede. Pp. vi+351; 31 figs. in the text, 47 pls. Abhandlungen der Bayerischen Akademie der Wissenschaften, Philosophisch-philologische und historische Klasse, Vol. XXXIII, München, 1928.

Our knowledge of the ancient theatre has been greatly increased in the last ten years through several important publications, the most comprehensive of which is that of Professor Bulle. The form of the book follows in the main that established by Dr. Dörpfeld, and adopted by several German scholars in the same field: a more or less detailed description of a large number of monuments in Old Greece, Sicily, and Magna Graecia is made the basis for a general history of the development of the ancient theatre. To those, who, like the present reviewer, are more interested in an accurate understanding of the existing ruins than in the various conflicting opinions of the scholars, the first part is naturally the more important; consequently this review will be chiefly concerned with that part of the book. A synthetic treatise on the ancient theatre cannot be of great value until the individual monuments which it aims to explain are thoroughly investigated and understood. The ruins of the ancient theatres, for all that has been written on the subject, are, with a very few exceptions, so imperfectly known that no unanimity can be reached with regard to their chronology and classification.

The author's contribution to our knowledge of the buildings themselves is considerable. His observations of innumerable details hitherto unknown or disregarded which he has presented together with adequate and accurate drawings and photographs constitute the chief merit of the book. For this work his collaborator, H. Wirsing. deserves much of the credit. It is altogether astonishing how much the two men were able to accomplish in the very limited time at their disposal at each site. Obviously some of the details admit of different interpretations, a full discussion of which would require too much space. On the whole, the author has indulged in too much conjecture, and the distinction between facts and subjective interpretation is not clearly drawn. For example, on page 11 we are told that the rock-cutting at the east side of the Theatre at Thorikos was made for a bouleuterion before the theatre was built. The seven rock-cut seats on the northwest slope of the Museum Hill in Athens are offered for comparison. Since nothing whatever is known about the purpose of the latter, the

comparison is not illuminating. The chamber in the Theatre at Thorikos would be admirably suitable for a choros room, but it is altogether probable that the rock-cutting was originally caused by quarrying. No other explanation is needed for the asymetrical arrangement in a theatre of such irregular shape. The author's theory that the theatre was not originally intended for scenic performances is as arbitrary as his early dating of the building.

Equally astonishing is the explanation of the cuttings for the door jambs on the stylobate of the proskenion at Athens. Two sets of cuttings in the space for the door are said to be from a Byzantine house occupying the site of the theatre. If, as Bulle sets forth elsewhere (p. 333), painted curtains were sometimes stretched in front of the columns of the proskenion, a removable door frame might have been slipped into the cuttings and fastened to the epistyle above. Since the door frame was narrower than the door-opening indicated by the smaller cuttings near the columns, the two sets of doors could have been in place simultaneously. The wider door would then be the more permanent one. It would be desirable to have removable doors and door frames which could be changed together with the curtain according to the demands of the plays. Other explanations are also possible. Perhaps at one time the columns of the proskenion were removed and a solid wall built in their stead. A similar change took place at Sikyon (p. 195). The fact that practically no building material of the proskenion has survived can be more easily explained if the columns with their entablatures were replaced by a wall in classical times. Bulle conjecturally assigns to the proskenion a single fragment of a column, but in view of the survival of numerous pieces of epistyle blocks and parts of columns from the paraskenia, the disappearance of the material from the proskenion presents a real problem. The explanation may, I believe, be supplied on the assumption that a solid wall at one time replaced the columns of the proskenion, and the three sets of cuttings for the central door would be explained in the same way. Whichever of these explanations is correct, it seems incredible that a Byzantine house built several centuries after the Hellenistic proskenion had been removed and its stylobate buried under a Roman stage should have chanced to have its door in exactly the same place as the door of the proskenion.

The author's historical account of the Theatre

of Dionysos in its seventeen periods can hardly be accepted in toto. By disposing of the marble blocks used for the late paraskenia on the theory that they were taken from a choragic monument, he is free to pattern his restoration of the Lycurgus theatre after his own restoration of the theatre at Segesta. In this way he arrives at the conclusion that the Athens-Piraeus type with columns in the round is the latest form of Greek proskenion, for which pinakes were not intended and cannot have been used. But the theatre at Piraeus, which Bulle dates earlier than the Hellenistic construction of the theatre at Athens, was never completed, and it may be questioned whether it was ever used in its present form. The letters on the base of the proedria do not date the original theatre, but only a late rebuilding which remained half finished. Such a numbering for the original placing of the blocks would be meaningless. In fact, it offers indisputable proof that the blocks were once taken up (or were intended to be taken up), and relaid in their original order. The pavement of the passage between the proedria and the orchestra gutter, which was left in various stages of completion, is as rough and unsuitable for use as are the stylobate of the proskenion and the floor of the orchestra. Hence, to the author's conclusion that the rough space in front of the proskenion cannot have been used as the "main centre of the dramatic action," should be added the fact that the auditorium was left equally unsuitable for the use of spectators.

On page 39 and Plate 8 the corner between the proskenion and the paraskenia in the Theatre of Dionysos at Athens is incorrectly restored. Here two metopes must come together instead of a metope and a triglyph as restored by Bulle, unless we assume some peculiar spacing of the columns of the proskenion. The shallow "rabbet" on the rear side of the west parodos wall was not cut to receive floor slabs but was caused by corrosion from running water. The traces of the action of water on the marble are unmistakable. The protecting ridge which still remains along the joints would naturally have been removed if floor slabs were intended to be fitted into the sunk band. The single block preserved from the corresponding wall of the east parodos shows a similar wearing from water. This peculiar feature still calls for an explanation. May it not have some connection with the opening into the drain beneath the east paraskenion (see p. 58)?

The lengthy arguments for showing that the

material reused in the paraskenia and parodos walls did not originally belong to the theatre but was taken from a choragic monument do not seem convincing. As the author points out, the orthostate blocks in the stoa behind the threatre show exactly the same material with the same kind of tooling and exactly the same height, yet, in spite of this evidence to the contrary, he derives the material from a different building. The structure which he restores conjecturally (Pl. 9), though quite unlike any known type of choragic monument, has the shape of a scene-building such as that indicated by the foundations of the theatre. The only new feature is the "Zungenmauer." which makes very little sense in his restored monument.

The investigation of the drain (by W. Wrede) and the discovery of the base of the early proedria (by Lehmann-Hartleben) are of fundamental importance. The relative dates of the various periods of the drain and adjoining parts of the building are definitely established, and some important evidence for the absolute dating has been obtained.

The base of the wooden proedria can hardly have been polygonal as indicated in Plate 4, Plan II (cf. p. 70). Lehmann-Hartleben's suggestion that it was straight with a projecting arm on either side as at Ikaria is preferable. Bulle rejects this suggestion on the ground that such a combination of a straight auditorium with a circular orchestra would constitute "an unintelligible break in typology," a most hazardous argument. The comparison of the raised orchestra terrace with a Roman pulpitum is not happy. The Roman spectators sat or stood either on level ground or on a hillside sloping toward the show place, whereas here some of the spectators would be standing on a slope away from it.

On page 78 Bulle states that the limestone block with a cutting for a metal socket, which is now lying in the west paraskenion, was used for the crane between the time of the Thespis stage and the wood-and-stone skene I. Even if this small block were in situ it would be impossible to assign any definite date for it. Similar stones were used in connection with the curtain channel in Roman theatres, as in the Odeum at Corinth and the theatre at Syracuse.

With regard to the date and form of the earliest skene, definite evidence is lacking and one guess may be as good as another. The dates proposed by the author for the first four periods of construction appear astoundingly early. For the late fifth and the fourth century it might be possible still by means of excavation to determine the dates of the main periods beyond cavil. Dr. Homer Thompson has kindly called my attention to the fact that the Pnyx was rebuilt on a grand scale in the year 404/3 B.C., an undertaking which, according to his opinion, suggests that the theatre was not at that time sufficiently commodious for the assembly. In summarizing his chronological results Professor Bulle, fully aware of the large element of conjecture, prefaces his arrangement into seventeen periods by expressing his desire to see this arrangement soon made over on the basis of a more thoroughgoing study of the ruins.

The vexed problem concerning the existence of a stage in Greek times the author approaches from a new angle. His conclusion, which does not greatly differ from that of Haigh, Fiechter, et al., is that a low stage existed in the fifth and fourth centuries, and that the high logeion of the Hellenistic theatre was invented purposely to meet the needs of the new type of drama. For the early stage, however, he not only fails to produce any evidence, but he actually points to very definite evidence to the contrary. In the early scene-building at Eretria the space between the two paraskenia was apparently occupied by a wooden platform, raised ca. 0.20 m. above the orchestra floor. Professor Bulle's observation here is of inestimable value, in fact, it constitutes the only archaeological proof for the non-existence of the stage in Greek times. A wooden floor of that height was obviously not a stage comparable to that of the Roman theatre, but merely a wooden flooring for the convenience of the actors and perhaps intended to improve the acoustics. Unfortunately the author is not content to abide by that evidence, but concludes on the basis of literary evidence that the theatres at Athens and elsewhere were regularly provided with a low stage of about three steps.

I cannot share the author's view that many of the theatres, especially in Peloponnesos, were originally designed for non-scenic use. Is it probable that Megalopolis, the capital of the united Arcadians, which was conceived on such a grand scale and at a time when civic pride was at its height, should have been planned without a theatre suitable for dramatic performances? Certainly the need for such a building would have been more strongly felt at the time of the founding of the city than at any later period. In the theatre

at Sparta there are unmistakable traces of a Hellenistic proskenion. The grooved stones which Bulle explains as the sill of a rolling stage, seem to be nothing but a water channel.

One of the most important chapters of the book is that dealing with the Theatre at Segesta. The detailed study of this building with excellent drawings of the material, as well as the restorations proposed, are especially welcome in view of the imperfect publications hitherto existing. But some of the details of the restoration seem farfetched. The cuttings in the cornice of the upper story are entirely too small for ceiling beams. In some cases these cuttings extend only 51/2 cm. from the edge. One of the stones (P9, Pl. 20), nearly one metre long, has no such cuttings at all, while another, only slightly longer, has two cuttings some 20 cm. apart. Such irregularity in the spacing of the beams is inexplicable. No less startling is the conclusion that the front of the gables was made not of stone but of wood. The author's motivation for such an arrangement is to make possible the removal of the gable when divinities made their appearance at the top of the building at this place.

On page 170 appears the following sentence: "Die westliche Hyposkenionthür (at Epidauros) ist von 2 Kalksteinpfeiler eingefasst, die östliche hat nur einen, die westliche keinen." The first "westliche" I suppose should be "mittlere," but in the absence of a plan it is difficult to decide.

The book contains much that is new about the monuments and deals with so much controversial matter that only a few points can be noted in a review of this kind. It is obviously intended for specialists, who will find it sufficiently difficult to read and yet decidedly worth the effort. But the crying need for the student of the ancient theatre is a series of monographs like von Gerkan's "Das Theater von Priene." Professor Fiechter's new series of books, Antike griechische Theaterbauten, which are intended to fill this need, are excellent architectural studies, but will not satisfy the general archaeologist. Above all is needed a systematic investigation of the Theatre of Dionysos with supplementary digging to determine so far as possible the nature of the undisturbed fill, with adequate plans and drawings of the monument itself and all the related building material. Until that is accomplished, general treatises, however well written, will be of little avail. It seems to me a matter of regret that the prodigious amount of industry which Professor Bulle and his collaborators devoted to their work, the thorough knowledge of the subject, and the acumen applied to the various problems, were not concentrated in an exhaustive study of that one monument in which were acted for the first time the immortal masterpieces of dramatic art which continue to challenge all who are interested in a study of the ancient theatre and which more than anything else make such a study worth while.

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Corpus Vasorum Antiquorum: United States of America 4 = the Robinson Collection, Baltimore, Md., 1. By David Moore Robinson, with the assistance of Mary W. McGehee. Pp. 58, 48 pls. Cambridge, Mass., Harvard University Press, 1934. \$5.00.

In the first fascicule of his interesting collection in Baltimore, Dr. Robinson has published his Attic black-figured and white ground vases and most of his early pottery, leaving the Attic red-figured to later fascicules. A few of the black-figured vases have been published before: the kylix signed by Xenokles (Hoppin, B.-F. Vases, pp. 410-413), the amphora of Nikosthenes (A.J.A. XXVI, 1922, pp. 54 ff.; the only other signed vase in America is in Providence; C.V.A. III H e, Pl. 9, 2 a-c), and the plate attributed by Dr. Robinson to an artist he dubs the "Strife" painter (A.J.A. XXXIV, 1930, pp. 353 ff.). Among the new vases are a Siana cup, a kotyle by Mingazzini's White Heron painter (Vasi Castellani, pp. 313 ff., where he lists many others of the same shape), two vases and a fragment of a third by or akin to the Antimenes painter (Beazley, J.H.S. LIV, 1934, pp. 89-90), two by the Diosphos painter, and a set of four good Panathenaic amphorae of the end of the fifth century. Of the white ground vases only the pyxis assigned to the Penthesileia painter has previously been discussed (A.J.A. XXXIV, 1930, pp. 177 ff.). The high points of the new lot are the small altar from Skione and the black figured lekythos with youths riding dolphins.

By way of supplementary note: p. 32 f., text to Pl. 15, 4: many of these miniature kotylai are found in Corinth itself. Pl. 38, 6: lekythoi of this type found associated with late Corinthian "conventionalizing" ware in graves of the first quarter of the fifth century in the Argolid. Pl. 48: fragments of the hawksbeaks of similar votive altars found at Corinth. The clay looks very Corinthian.

Shapes. P. 27, Pl. 12, 1–3: should not these vases be termed jugs rather than cups? Cf. C.V., Cambridge, III H, Pl. 1, 5–8 and 21, especially 8. P. 34, Pl. 16, 2–4: askoi? P. 49, Pl. 33, 4: can the fragment come from a Panathenaic amphora of the fourth century? Given the tongues immediately above the side panel, a "closed vase of the late sixth" seems to fit the circumstances and the style rather better. P. 56 f., Pl. 47, 1: an amphoriskos rather than a lekythos, because of the two handles? In any case, however, a perfume vase.

Two minor errors may be noted: on p. 45, text to Pl. 30, 1, 2, "faun" is substituted for "fawn," and on p. 50, Pl. 37, 1, the kantharos is in the right hand of Dionysos.

The descriptions in the text are full, the bibliography ample, and the printing and the photography good, although to the layman in the prehistoric field the portraits of several of the undecorated fragments of Helladic pottery (Pl. 7, 11 ff.) are remarkably alike. Since the arduous task of compiling lists of general bibliography has been so comprehensively performed in this and other numbers of the *Corpus*, further bibliographical reference will soon be unnecessary except in cases where it applies to particular points in the vases under discussion.

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CAMPANA FRAGMENTS IN FLORENCE, by J. D. Beazley. Pp. 35; 3 Pls.; 18 transparencies. Oxford University Press, 1933. \$5.50.

The frontispiece of this book (Pl. X) gives a good idea of its contents. It illustrates a red-figured cup, "an early, charming work by Oltos," broken into thirty or forty pieces, but preserved nearly complete. Where is it? The title of the plate gives this amazing answer: "Cup in Rome, Villa Giulia; Florence; Heidelberg; Brunswick; Baltimore; and Bowdoin College." Here is another sample: The famous Eos cup in Boston by the Telephos painter with Hieron's signature as potter was first published nearly a century ago. It has been known chiefly through the drawings in the catalogue of the Burlington Exhibition in 1888, which have been frequently reproduced since. They show the decoration as if it were completely preserved. Actually there are large lacunae. But the restorations are so cleverly done that they have escaped notice, or at least have never been mentioned in print. Professor Beazley, on Plate Y, 5-8, illustrates four of the missing fragments, which he has identified in the Villa Giulia, and refers to a fifth, reproduced in *Corpus Vas-orum*, Florence, Fasc. 1, Pl. 11.

The history of these sherds, as far as it is known or can be inferred, is given in the preface. After the fall of Campana in 1857, the residue of his collection lay sequestered in the Monte di Pietà at Rome until 1871, when it was bought for the museum of Florence. In 1929 Beazley noticed that some of the Castellani fragments in the Villa Giulia came from the same vases as Campana fragments in Florence. It became clear to him that Alessandro Castellani, or some agent of his, had had access to the Campana fragments while they had lain in the Monte di Pietà. "Castellani kept some of his acquisitions; these descended to his brother Augusto, and passed with other property of Augusto's to the Villa Giulia. Kept some; but disposed of others: for the disjecta membra are not confined to Rome and Florence, but crop up all over Europe and America."

Some of the results of his work on the fragments have already been published by Beazley in an article ("Disjecta Membra," J.H.S., 1931, pp. 39-56), originally written as a report to the Directors of the two Italian museums, in consequence of which it was decided to send all the red-figured fragments of the Campana "collection" to Rome, all the black-figured fragments of the Castellani "collection" to Florence; and to make a new distribution when all the material should have been worked through. He was thus enabled in 1932 to work again at all the redfigured fragments together at the Villa Giulia, and to make fresh discoveries, which necessitated the rewriting of his book. By this time the redfigured Campana fragments in Florence had been catalogued by Dr. Doro Levi in the Corpus. The present work therefore appears in the form of a commentary on that publication. Unfortunately, on the plates in the Corpus few of the fragments have been given separate numbers. This has made it necessary to renumber them on transparencies. "Seventeen (actually 18) flimsies," the author remarks, "are an austere mode of illustration. I have mitigated them by the addition of three collotype plates, but even so I doubt whether my book will ever be popular." Not a book for the multitude, certainly; but, just as certainly, one that every serious student of the subject will be well advised to read with care. To quote once more from the preface: "It does contain many new disjecta; but these form only part of the

work. I have gone through the catalogue and set down, first, joins and pertinences (whether within the collection or extraneous); second, subject, where not obvious, and interpretation; third, period, style, authorship." In other words, a commentary such as only Professor Beazley could give us. Fine works by many of the chief masters of red-figured vase painting will be found among these sherds, which have been so strangely dispersed over two continents. And, as was to be expected, several new artists appear, with lists of their works. An appendix, consisting of thirty-three items, gives disject anot concerning vases in the Florence Corpus, most of them published here for the first time.

It is unlikely that many of these disjects can be reunited. But a beginning has already been made: through the kindness of Professor Schweitzer, two Leipzic fragments (Appendix, 12 bis and 25) have recently been incorporated in the cups in Boston, to which they belong.

L. D. CASKEY

MUSEUM OF FINE ARTS Boston

Pagasai und Demetrias, by Fr. Stählin, Ernst Meyer, and A. Heidner. Pp. xii+273, pls. 24, figs. in text 35, plans 3. Berlin and Leipzig, Walter de Gruyter & Co., 1934. RM. 27.

Until 1911 the ancient walled sites on either side of the modern city of Volo were wrongly identified, with the small one to the east very generally mistaken for the Hellenistic Demetrias and the extensive ruins on the west of the bay taken for the classical Pagasai. The observation that there were two independent and not coterminous sets of walls on the latter site finally brought the recognition that the classical and Hellenistic towns lay side by side and that the small, strongly fortified town across the bay had nothing to do with either. The next step should be the systematic investigation of the double town by excavation; but this deed still largely awaits the doer. Meanwhile, on the basis of the desultory digging of the Greek ephor before the War and their own visits in the summers of 1926 and 1930, two German scholars have set down in an exhaustive work on Pagasai and Demetrias all that may be known until something more is discovered. This amounts to a considerable array of history-Hellenistic, Roman, and medieval-skilfully assembled by Prof. Ernst Meyer of Zurich, and on the archaeological side a minutely careful study of the walls

of both towns by Dr. Stählin of Nürnberg, already author of a book on Thessaly. Little otherwise of architectural significance seems to have survived from either settlement. Dr. Heidner has done yeoman service in producing the first proper survey of the extensive and irregular terrain occupied by the twin towns.

It is perhaps captious to complain that the present treatment is slightly old-fashioned in its accumulation of detail; for it magnificently realizes its ideal of converting limestone into paper and enclosing a portion of the head of the Gulf of Volo between two linen covers. The study of Greek city walls is very much in fashion; and only detailed reproductions of the actual stones in their actual places will ever assemble the material out of which to establish some sort of stylistic chronology. And precisely such a construction as Demetrias, built at a known time (shortly after 294 B.C.) and enduring for a limited period (until the Roman destruction in 167 B.C.), makes it a most valuable document for the new band of "teichologists." Thus the present reviewer, occupied with a publication of the walls of Corinth. has found most helpful the evidence that the Roman dismantling of Demetrias was largely a removal of the brick superstructure of the walls, leaving (as at Corinth) the masonry socle intact; and has profited also by certain striking technical parallels, pertinent because Demetrius Poliorcetes was once master both of Thessaly and the Isthmus.

If, therefore, one cannot help believing that the second city of Macedon can sometime be made to yield more than its periphery of walls and its kernel of historical allusions, one may at least accept with thanks as an essential propaedeutic the careful surveys, the well-taken and well-printed photographs, the tireless documentation of this long labor of devotion.

RHYS CARPENTER

BRYN MAWR COLLEGE

Entwicklungsgeschichte der Griechischen Tracht, by Margarete Bieber, Pp. 64, pls. 54, figs. in text 12. Berlin, Gebr. Mann, 1934. RM, 50.

This is in many ways an excellent book; but it is also a somewhat peculiar one. It is not a study of the component elements of Greek dress; Miss Bieber has already produced such a study in her "Griechische Kleidung" (1928), to which the present work is in a sense a supplement. It is not a study of the sculptural use of drapery, even

though the second part of the text is so entitled; for a subject nearly half as vast as the whole history of Greek sculpture cannot even be summarized in 7 quarto pages. It is largely a picturebook, with magnificently printed large plates; yet it is not an album of drapery forms, since even 54 plates can only touch the fringe of such a field. Most of the text is devoted to an historical survey of ancient, and particularly Greek, costume. As such, it is a miracle of condensation: Egyptian costume is outlined in a single page, Hellenistic Greek in less than two, the whole range of Mediterranean antiquity through 3000 years in less than thirty. Add the 7 pages already mentioned, the 54 plates and 12 text illustrations, a chronological table, the necessary indices, and that is the entire book.

Yet, for all their brevity, Miss Bieber's remarks are not those of the précis writer, but are farreaching and full of discernment and judgment. What a vast amount of "literature" is summarized (and spared the reader) in such a seemingly harmless sentence as, "Die homerische Tracht ist also bereits rein griechisch." The characterization of the spiritual as well as material differences between Greek and Roman costume is penetrating and lucid. Greek dress during the period of Roman rule is almost a new topic. All the illustrations are well chosen, being neither the old familiar landmarks nor yet affectedly out-of-theway novelties, but such as best embody and visualize the text. The section on costume in Greek sculpture is, however, almost too condensed to succeed. And such obstinate and outworn heresies as dating the Nike of Paionios and the Nereid Monument in the middle of the fifth century must nullify any appearance of logical evolution of drapery forms in that period. The references to "the master" of the Phigalea frieze, "the master" of the Parthenon pediments, must surely betoken carelessness rather than conviction. In describing the Ephesus columns the possibility has been overlooked that, though the round bases are certainly fourth century, the square pedestal carvings are more probably Roman. The whole topic of sculptural drapery is too large for such condensation and merits at least a volume to itself. Then the chronology of Hellenistic statuary, at which so many unsuccessful attempts have been made in recent years, will fall like a ripe fruit into the hands of any one who will take the trouble to investigate really fully and intelligently the evolution of drapery styles.

In summary, the present work is a masterly condensation of the history of Greek dress by one who genuinely comprehends its forms: a superencyclopaedia article, sumptuously printed and illustrated. It might have been a much-read booklet in everyone's possession; but the desire to keep the photographs large and clear has condemned it to be an *objet de luxe* at RM. 50.

RHYS CARPENTER

BRYN MAWR COLLEGE

Introduction à l'Histoire de la Monnaie et Histoire Monétaire de la Perse des Origines à la Fin de la Période Partiie, by Gholam-Reza Kian, Docteur des Sciences juridiques et économiques de l'Université de Paris, Pp. 247, figs. 10. Paris, Paul Geuthner, 1934, 60 frs.

The author of this work puts into a clear, concise and very readable form what is today known, or can be surmised, concerning the general origin of money, and the early numismatic history of Persia. As the title indicates, this volume is divided into two parts. The first deals with the concept and origin of money, its development from simple barter to coinage. The author adds little that is new, except, perhaps, now and then references (pp. 13, 17-18, 22-23, 52) to practices of his native Persia which serve to illustrate the story. He is most interesting in the brief outline history of the various metals used, their gradually shifting value and interrelationship through the early ages in the Near East, and the differences in practice between Egyptians, Mesopotamians, Phoenicians and the early inhabitants of Greece, The author sustains the thesis that coinage, in the full sense of this term, was an invention of the Ionian Greeks, but that it was the Lydian Empire which gave to coinage its first systematic regulation and expansion. The first part concludes with a brief discussion of the Babylonian origin of the weight systems employed. The study would perhaps have been more authoritative if the author had deigned to take a little more cognizance of the important work recently done by certain German scholars.

The second part presents a review and condensed discussion of the actual coinages issued by the Achaemenid and Arsacid kings. The intervening important Greek period of Alexander and his successors is too summarily treated. The author believes, but does not present convincing proofs, that the well known Achaemenid daric

and siglos were introduced by Cyrus instead of by Darius I. He accepts, in toto, Babelon's generally discredited theory with regard to the iconographic value of these coins. Coming to the Parthian coinage, the author rightly rejects de Morgan's fanciful theory concerning the priestly origin of the first or "beardless" issues. He explains the total absence of Arsacid gold coins on historic and economic grounds, refuting Mommsen's impossible suggestion that the powerful Parthian kings humbly respected Rome's claim to a sort of world monopoly of gold coinage. The author further rejects de Morgan's claim of a multiplicity of Arsacid weight systems. On the whole, in his Parthian section, the author displays commendable restraint and a close adherence to common sense orthodoxy. The book closes with a good but far from exhaustive bibliography which, again, reveals a distinct aversion to including the E. T. NEWELL works of German scholars. AMERICAN NUMISMATIC SOCIETY

New York

ROYAL CORRESPONDENCE IN THE HELLENISTIC PERIOD. A Study in Greek Epigraphy, by C. Bradford Welles. Pp. c+405; pls. XII. New Haven, Conn., Yale University Press, 1934. 82.50.

The subject matter of Professor Welles' book is more limited than its title suggests, for it includes only those letters of Hellenistic kings which have been found inscribed on stone in Asia or on islands in Asiatic waters. Thus the Lagids are represented only by documents from the periphery of their dominions, and the Macedonian monarchs are omitted entirely. Though this limitation was due largely to convenience, it is justified by the statement that the papyrus texts from Egypt and the inscriptions from Greece and Macedonia are for the most part administrative rather than diplomatic in character. Granting the truth of this generalization, one must still admit that the geographical principle of selection permits the inclusion of administrative letters, such as, for example, No. 30, a letter of Ptolemy IV (?) to an official in Cilicia ordering him to cease the billeting of soldiers in Soli; and, at the same time, it excludes diplomatic letters which happen to have been found elsewhere.

The collection begins with Antigonus' letter to Scepsis regarding the peace of that year, and it ends with a rescript of the Parthian Artaban III written in 21 A.D. to Susa about the legality of an

election there. There are seventy-five letters in all. distributed as follows: Antigonus 4; Lysimachus 2; Seleucids 25; Attalids 28; Lagids 5; miscellaneous 11. The text of the letters is reprinted; translations are given; and explanatory notes, both historical and stylistic, are appended. The introductory notes, containing information about the stones and their discovery, together with detailed bibliographical lemmata, are evidence both of the care with which the editor has done his work and of the great importance of his documents. When one learns also that many of the letters have been examined by the author himself and that few of them have not benefited by restorations which his examination of the stones and his close study of the epistolary style of Hellenistic chanceries have suggested, the value of his work becomes at once apparent. Photographs of twelve selections are given.

This book began as an investigation into the vocabulary of the royal letters, but as the work progressed Professor Welles saw that their text and interpretation would repay further study. Thus, when the work reached completion, he decided to make the historical analysis of the letters the body of the book, and to divide the linguistic material between the introduction and an appendix. In his introduction the author discusses the letters from the standpoint of literary style and language, with sections on paleography, sounds, inflections, syntax, and vocabulary. He concludes with a summary in which he shows how the documents reflect the growth of the Koine. In the appendix, Welles gives a list of the words which form the basis for the general conclusions which he reaches in his introduction. It includes words found nowhere else, words used with meanings otherwise unknown, words not found before the Koine, those which appear in the Koine with new meanings, and others which fall into less significant categories. In this glossary, Welles gives briefly a history of each word, showing when and where used and with what meanings. In passing, it may be noted that one of his ἄπαξ λεγόμενα (προσαφορίζω) is found in Galen, whereas another προσδια[δίδωμι] is a restoration made by the author himself. Its existence, however probable, is therefore still conjectural. In view of the wealth of parallels which Welles troubles to cite, literary, papyrological, and epigraphical, it is interesting to note his omission of references to an inscription found near Sardis.1 I speak of it here because of

<sup>1</sup> Sardis, VII, Part I, No. 2.

its resemblance to a royal letter. On what grounds was its exclusion from the collection determined?

On the whole one can find little to criticize in Professor Welles' presentation of this material. Although there are doubtless statements to which exception can be taken, that is inevitable. I refer to one in particular, the identification of Bunarbashi with ancient Troy (p. 253).

In conclusion, may I express the hope that Welles will continue the work which he has begun so auspiciously? It would be helpful, indeed, if he widened the scope of his investigations to include letters from the Roman Senate and from Roman officials in Greek lands.

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ATHÈNES SOUS HADRIEN, by Paul Graindor. Pp. ix+317, pls. 16. Ministère de l'Instruction Publique, Le Caire, Imprimerie Nationale, 1934. 1

"Thus Athens, damaged by the war with Rome, flourished again under the Emperor Hadrian." These words of Pausanias, contrasting the treatment of Athens at the hands of Sulla with the favors showered upon her by the emperor whose interest in Hellenism earned him the epithet Graeculus, are taken by Professor Graindor of the Egyptian University in Cairo as the text of the handsome volume which forms the latest of his studies of Roman Athens. The two earlier books, Athènes sous Auguste (1927) and Athènes de Tibère à Trajan (1931), brought the city down through the first hundred and fifty years of the Roman Empire, and this third volume contains what is known of the twenty years of her most splendid period since the time of Pericles.

It is a careful, thorough book, such as would be expected of the author. Professor Graindor has devoted his life to the study of Athens under the Empire, having begun, correctly, with the inscriptions, which form the principal and on many points the only source of information for the city's history during this period. His historical studies, which include, in addition to those mentioned above, a life of Herodes Atticus (Un Milliardaire Antique, Hérode Atticus et sa Famille, 1930), are built upon a methodologically sound foundation. The author can speak with authority, for he has himself contributed to the

<sup>1</sup> Cf. the author's own summary of the contents of the volume in the *Bulletin of the Faculty of Arts*, University of Egypt, II, 1, 1934, pp. 117–120.

solution of many problems, and even where one may disagree with his conclusions, his discussion and his bibliography are always valuable. This is especially true of the present volume, where the author has made frequent use of the results of the most recent excavations in the Agora and elsewhere, and has personally reviewed the inscriptions and monuments he describes. Thanks are due him particularly for the excellent plates, which include twenty-seven items. The eight reproductions of inscriptions are particularly clear and useful.

The volume is, then, one which specialists must consult. Its exhaustive character will make it a useful handbook for beginners also. It is true that the book contains little that is absolutely new, little that has not been said before by the author or by others. It is true, also, that, for the most part, the seven chapters which comprise the book are occupied with detailed studies, while the main lines of the picture are left for the reader himself to fill in. But even so, Athens in the time of Hadrian is a fascinating subject for the student of humanism. It was a period of culture and magnificence, of lavish building and of luxury and of polite arts and letters, all overlaid by an archaistic coloring, an intense consciousness of and interest in the past. To recover the life and spirit of the time is a task, perhaps, of a literary or of an antiquarian character, but Professor Graindor is in no way blind to the peculiar charm of the subject. His consciousness of it appears constantly, especially in his four pages of Conclusion. Thus while the book tends to be uneven, and is in places even repetitious, it will give the general reader much that will repay him.

The principal conclusions of the book may be summarized briefly. The first two chapters are concerned with chronology. Hadrian's three visits to Athens took place respectively in A.D. 124/5, 128/9, and 131/2. In the first, the Emperor came to the city in the month Boedromion to be initiated at the Great Mysteries at Eleusis, and afterwards visited the Peloponnese, returning to pass the remainder of the winter at Athens, serving as agonothetes at the Great Dionysia. During this stay, he prepared for Athens a new constitution, a return to the πάτριος πολιτεία of Draco and of Solon; a section of this is preserved in the Oil Law inscribed on the Gate of the Roman Agora. The construction of the Olympieum and of the new quarter of the city was begun, and a new tribe was instituted, the Hadrianis, with demes

taken from the other tribes but none from Athens itself; subsequently the new quarter became a deme in this tribe. At the same time the membership in the Boule was reduced from 600 to 500. The establishment of the month Hadrianon came later. During the second visit of the emperor, he attended the Mysteries as epoptes. During the third, in the early months of A.D. 132, the Olympieum was ded.cated with a discourse of the sophist Polemon, and games, Olympiea, were celebrated in the presence of a throng of delegates from the whole Greek world. From these events, two eras arose, one of Olympiads and one "from the founding of the Temple of Zeus Olympius," just as an earlier era had started from the first visit of Hadrian (της Τραιανού 'Αδριανού Καίσαρος έπιδημίας). During the third visit, also, was founded a Temple of Zeus Panhellenius and Panhellenian games, as center and expression, respectively, of the Council of the Panhellenes, established earlier in Hadrian's reign to mark Athens' spiritual hegemony over all members of the Greek race. This conception found another expression at the end of Hadrian's reign in the founding of a Greek Pantheon at Athens corresponding to the other Pantheon at Rome.

The remaining chapters may be passed over briefly. Chapter 3, "Foreigners at Athens," contains some new prosopographical material, notably the identification of Statius Quadratus priest of the Imperial Cult with the L. Statius Quadratus who was consul in A.D. 142. Chapter 4 is occupied with Athens' Political Institutions. The author defends his thesis that the special privileges of the Land of Hipparchus, mentioned in the Oil Law, had been granted by the state as an inducement to purchasers because of the enormous amount of the confiscated land to be disposed of at once. Of particular interest is the provision of Hadrian that city councillors might not contract to farm the local taxes. Chapter 5, "Religious Antiquities," shows on the one hand the antiquarian interest of the time, which led to a resumption of old obligations, the delivery of first-fruits at Eleusis and the sending of annual sacrifices to Delos and to Delphi, while on the other hand new imported cults maintained themselves, Egyptian worships and notably Christianity, which even, if the tradition is to be believed, secured temporary imperial recognition through the efforts of the Greek apologist Aristides. The imperial cult flourished, naturally; the emperor himself, the empress, and Antinous, all received

worship in various forms. In Chapter 6, "Athens and the Athenians," the extremes of wealth and poverty in the city are well brought out, and the miserable position of the proletariat is described, dependent upon public charity, and rising in a bread riot when this was withheld. Chapter 7, "Literature and the Arts," is the longest in the volume. The career of the sophist Lollianus is described, and the scant evidence for the writers and philosophers of the day is assembled. Much of it comes from the amusing Banquet of Philosophers described by Alciphron, and the author is undoubtedly right in accepting the philosophers concerned as historical. The book ends with an examination of the monuments of architecture and sculpture which date from Hadrian's reign. To the general reader this section may well be the most interesting of the whole volume. It is clear and consecutive, and well illustrated with numerous plates. The descriptions of the Olympieum and of the Library, however, would be more lucid if they were accompanied by plans of the buildings.

A few words may be added as to details. The earliest mention of the Council of 500, offering a terminus ante quem for the inauguration of the new constitution, occurs in a dedication to Aemilius Juneus, πρεσβευτής Σεβατοῦ καὶ ἀντιστράτηγος (I.G. III, 622). The precise office held by Juneus is disputed; the title given him is not. apparently, technical. But the question is, was this mission of Juneus before or after his suffectus consulship in A.D. 127? Graindor defends (pp. 21-25) the prevailing opinion, against Kolbe (Ath. Mitt. XLVI, 1921, pp .125-128), that it was before. I believe that an additional argument in his favor may be found in the title ἀντιστράτηγος given to Juncus. This regularly (though not, of course, always) means propraetor, not proconsul.

Graindor gives (pp. 74-79) a good analysis of Hadrian's law relating to the export of olive oil (I.G. II², 1100), following in the main the conclusions of Boeckh. In line 9, however, he properly rejects the restoration of Boeckh, and substitutes one of his own. The passage is as follows:  $\kappa\alpha\tau\alpha\varphi\epsilon\rho\epsilon\tau\omega\sigma\alpha\nu$   $\delta\dot{\epsilon}$   $\dot{\alpha}\mu\alpha$   $\tau\ddot{\varphi}$   $\dot{\alpha}\rho\xi\alpha\sigma\theta\alpha\iota$   $\sigma\nu\nu\kappa\sigma[\mu\iota\delta\eta\kappa]$   $\kappa[\alpha\tau\dot{\alpha}$   $\mu\dot{\epsilon}\rho\rho\sigma$   $\pi\rho\dot{\delta}\sigma$   $\lambda\dot{\delta}\gamma\rho\nu$   $\tau\sigma[\tilde{v}]$ .....]  $o\mu\dot{\epsilon}\nu\sigma\nu$   $\tau\ddot{\epsilon}\dot{\sigma}\dot{\epsilon}\dot{\delta}\dot{\epsilon}\dot{\nu}$   $\nu\alpha\iota[s]$ . For the lacuna, whose length is indicated in I.G. III, 38, as of precisely the same length as that in line 8, Boeckh's  $[\sigma\nu\nu\kappa\rho\mu\iota\zeta]o\mu\dot{\epsilon}\nu\sigma\nu$  is manifestly too long. Graindor ingeniously suggests  $[\dot{\phi}\varphi\epsilon\iota\lambda]o\mu\dot{\epsilon}\nu\sigma\nu$ , "Let them begin delivery to the Oil Buyers simultaneously with the beginning of the harvest

in partial payments proportionally with regard to the need." Later in the text, a provision occurs giving oil producers the right to keep the superfluity of their production if the crop is so large that it exceeds the city's requirements. But I cannot feel that this restoration is correct. Not only is [ὁφειλ]ομένου too short by one letter. The whole question of a possible excess production of oil is taken up only at the end of the text, after all the measures have been enacted to assure a collection of what is due. I cannot think that the possibility was considered here at the beginning. Some restoration in the sense of that proposed by Boeckh must be found for the lacuna, something which will explain κατὰ μέρος. The sense of the passage must be: "Let them deliver, etc., in partial payments in proportion to that which is harvested." In other words, if the first stage of the harvest yielded the cultivator one-fifth of his expected total, he should pay to the city officials one-fifth of his tax, without waiting for the whole harvest to be in. The discussion of this text would be made more lucid for the reader of the volume if Graindor had quoted it in its entirety, or in pertinent part.

The same is true of the discussion of the list I.G. II<sup>2</sup>, 2776, below, pp. 184-191. For this, Graindor proposes a new interpretation, rejecting the generally accepted view of Mommsen that it is an obligatio praediorum. I do not wish to go into his argument against this view, which seems to me to have some weight. For one thing, all obligationes known are in Latin texts, and their phraseology is somewhat different. For another, the exact amounts specified in the list, running into fractions of a (bronze) drachma, seem to be rather payments than capital sums, percentages of a larger amount. But I cannot, on the other hand, subscribe at all to Graindor's comparison of the list with the Property-Sale List from Tenos (I.G. XII, 5, 872) of the third century B.C. In that text, the transaction is expressly defined: "Soand-so bought from so-and-so such a property at such a price." The peculiarity of I.G. II<sup>2</sup>, 2776, is precisely that the transaction is not defined at all. Lines 69-72 may be cited as representative: Φλ(αύιος) Δωρόθεος et al. κήπου πρός τη 'Αχαρνική Πύλη προσαγορευομένου Κειονίου, with a sum in denarii and drachmae following. The meaning should be, "So-and-so (pays or owes) such a sum (for or upon) such a piece of property." The difculty lies in the explanation of the genitive case.

On p. 162, the author argues that the dedication

to Asclepius I.G. III, 163, must be connected with the cult of Serapis. The theory is reasonable enough in itself, but I do not think it can be supported by an argument from the formula  $\kappa\alpha\tau'$   $\dot{\epsilon}\pi\dot{\iota}\tau\alpha\gamma\mu\alpha$ . The formula  $\kappa\alpha\tau\dot{\alpha}\pi\rho\dot{\delta}\sigma\tau\alpha\gamma\mu\alpha$  is commonly used in dedications to the Egyptian deities, but  $\kappa\alpha\tau'$   $\dot{\epsilon}\pi\dot{\iota}\tau\alpha\gamma\mu\alpha$  is rare in any connection; after a somewhat superficial search I can cite as parallel only the fragmentary I.G. III, 209, and the formula is not cited at all in the collection of Nock's (J.H.S. XLV, 1925, p. 95 f.) to which Graindor refers. On the other hand, the closely related formula  $\kappa\alpha\tau'\dot{\epsilon}\pi\iota\tau\alpha\gamma'\eta\nu$  is used in connection with a variety of deities, as Nock shows.

There are certain points, therefore, on which I should disagree with Professor Graindor's conclusions, but these do not affect my estimate of the value of the book as a whole. It is a fine and useful piece of work, and barring the accident of new discoveries, it should remain an authoritative handbook for many years to come.

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Office International des Musées, La Conservation des Monuments d'Art et d'Histoire. Published by the Institut de Coöperation Intellectuelle, Paris, 1933. Pp. 489, 55 pls.

While the first task of the archaeologist is to explore, to excavate, and to discover new evidence of the arts and life of past civilizations, it cannot be denied that each discovery creates the immediate obligation to publish it to the world. And there is a third, less obvious duty that archaeologists are likely to shift to other shoulders, that is, the preservation of the finds.

Fortunately the museums are eager to assume this task. Usually only the most summary treatments are necessary in the field, for a wealth of expert technical knowledge has been acquired by museum workers in the preservation, cleaning, mounting and exhibiting of all the movable objects that result from active exploration. But the immovable monuments of archaeology often fare less well, for the problems of conservation and display of architectural monuments are not to be solved in the workshop, and usually involve such large expense that they can be considered only by governmental agencies. For this reason they have received far less attention from archaeologists in general than they deserve, and it is therefore particularly fortunate that the conference held in Athens in 1931 under the auspices of the International Museums Office of the Intellectual Cooperation Organization of the League of Nations devoted itself wholly to problems of architectural conservation and restoration.

The present volume is the result of that conference, composed of papers there presented by authorities of many nationalities. It makes no claim to be a treatise on the Preservation of Ancient Monuments, but rather attempts merely to present the problems and point out methods of approach. And within these limits it presents a unique store of diverse information, illuminating commentary and stimulating vision.

The well ordered subject matter is considered under eight heads: doctrines—general principles; administrative and legislative measures regarding historical monuments; aesthetic enhancement of ancient monuments; restoration materials; the deterioration of ancient monuments; the technique of conservation—characteristic examples; the conservation of monuments and international collaboration; conclusions.

The work is profusely illustrated with heliotype plates showing monuments before and after restoration, and drawings illustrating the methods of attacking the various problems involved. The complete French text is followed by a full analytical table of contents with agenda and conclusions, resolutions and recommendations of the conference in English, the conclusions, again, in German, Spanish and Italian, a list of members of the conference, and an index of authors.

LEICESTER B. HOLLAND

WASHINGTON, D. C.

Forma Orbis Romani: Carte Archéologique de la Gaule Romaine Dressée Sous la Direction de M. Adrien Blanchet. Fasc. IV: Carte de la Partie Occidentale du Département du Var et de la Partie Orientale du Département des Bouches-du-Rhône, by Paul Couissin, Henry de Gérin-Ricard and Fernand Benoît. Paris, Ernest Leroux, 1934.

This is a further installment of the great work to be completed in 78 numbers on Roman Gaul undertaken by the Académie des Inscriptions et Belles-Lettres of the Institut de France, under the supervision of Adrien Blanchet. The preceding fascicules have been reviewed by the writer, I (Dépt. des Alpes Maritimes et des Basses-Alpes, 1931) and II (Dépt. du Var, partie orientale, 1932) in A.J.A., 1933, 519-21; and III (Dépt. de la

Corse, 1934), ibid., 1935, 162–4. These titles will show that the natural sequence was interrupted after fasc. II, owing to the death of the sub-editor, Paul Couissin, by the appearance of fasc. III on Corsica.

The present installment is the first of the series to include a map only without accompanying text. This anomaly is to be expected in issuing the series, since the scale of maps used-1:200000makes it impossible always to have the map correspond in extent with a given département, since it may often include territories in adjacent areas; thus the text for the western half of the Dépt. du Var has already appeared in fasc. II, while that of the western half of the Dépt. des Bouches-du-Rhône along with the eastern will appear with fasc. V, still unpublished. The editor has thus far felt it necessary to follow the plan with which the series began, but the work would be greatly enhanced in value if that plan were changed, so that in future map and text might appear together. This is the only considerable criticism that can be found in a publication otherwise excellent, and it would seem easy to rectify it.

The present map, like its predecessors, is based on the French Army Survey, with historical information assembled for the western half of the Dépt. du Var by Paul Couissin and Count Henry de Gérin-Ricard, and for the eastern half of the Dépt. des Bouches-du-Rhône by Fernand Benoft, curator of the Archaeological Museums at Arles (Arelate), assisted also by Count Henry. It discloses Roman roads in blue and the locations of all Roman milestones found along them in red. The canton of Beausset, for example, in the southwestern corner of the Dépt. du Var near Toulon (Telo Martius or Telonium), a district once under the control of Greek Massilia (Marseille) shows, from the great number of Roman sites there, nos. 106-141, what can be accomplished elsewhere in France in the way of recovering Roman remains by the collective labors of successive explorers, such as those whose work was appraised in the text of fasc. II.

The elucidation of Roman sites and remains in the eastern section of the Dépt. des Bouches-du-Rhône must await the appearance of fasc. V, the map of which will present the western portion of that département and the text of which will comprehend both sections. This has been promised during the present year.

Walter Woodburn Hyde University of Pennsylvania DIE DATIERUNG DER MUMIENPORTRÄTS, by Heinrich Drerup. Studien zur Geschichte und Kultur des Altertums herausgegeben von E. Drerup. Vol. XIX, Part 1. Pp. 66, pls. 20. Paderborn, Schöningh, 1933. RM 4.80.

The author, who is preparing a complete collection of all existent mummy portraits, gives us a preliminary summary of his work. A bibliography precedes introductory chapters. He deals first with the type and its use and enumerates the places where the portraits are found estimating the number of extant examples at about 600. He next discusses their origin. He is inclined to assume, beside an Egyptian tradition, an influence of Roman art exercised by tombstones of Roman soldiers settled in Egypt after the occupation in 30 B.C. This hypothesis is not impossible, but not very convincing. As to the style, he finds a certain relationship with Eastern monuments in Dura, Palmyra and Cathay. It is to be hoped that Drerup will deal with this important point at length in his final publication. We must wait for this publication also in regard to his assertion that more than twenty-five groups can be distinguished stylistically, which originate in single masters or schools. The next chapter on garments, styles of hairdressing and jewelry includes other statements on which we are unable to pass judgment before the material is published. They are, nevertheless, worth noticing. I mention only those about the hairdressing: the Roman fashion is predominant until about 200, except that men follow the Greek fashion from the middle of the first century A.D. until the time of Trajan. From the third century onward independence of Rome increases steadily.

The matter is different concerning the main part of the book which deals with the stylistic development and with the dating of the portraits. Here the author has selected thirty-four representative examples which he reproduces on plates and which he analyzes at length so that we can test his method and his conclusions. His dates are based on fashions of hairdressing and, in general, on stylistic grounds. It becomes clear that the development in Egypt was parallel to that in Rome so that the Roman evolution, which is far better known to us, can be used for Egypt. His dates are very convincing. Only in two cases, Nos. 12 and 22, about which he is in doubt whether a little earlier or a little later date is preferable, the later dating seems to me certain. Very interesting is the variation of the portraits in number during

the different periods; they become increasingly numerous until Antonine times, decrease rapidly during the third century and are produced in masses in the fourth. His analyses of the style are vivid and suggestive, partly even a little too oratorical and tinged with classicism, but they elucidate the essential points very well. Only his assumption that Nos. 26, 27, 28 and also Nos. 30 and 31 are made by the same master is not convincing. In conclusion it may be said that this short and preliminary study has increased our knowledge to a considerable extent by laying a new and lasting foundation for this important group of monuments. VALENTIN MÜLLER BRYN MAWR COLLEGE

Notes on the History of Ancient Roads and their Construction, by R. J. Forbes. Allard Pierson Stichting, Universiteit van Amsterdam: Archaeologisch-historische Bijdragen, Deel III. Pp. xii+192, with 35 figs. in the text and 3 appended tables. Amsterdam: N. V. Noordhollandsche Uitgevers-Mij., 1934.

Without extensive personal exploration, Mr. Forbes has gathered a summary of accessible facts about the materials and methods of ancient road construction. The first three chapters introduce roads as geographical and as human phenomena, and modern road-construction as a basis for comparison-a sound procedure, for it has enabled Mr. Forbes to draw many apt parallels. Then are brought successively to our attention the prehistoric European commercial roads, English ridgeways and trackways, and especially the popular log roads of Holland and Germany, which survived through the Roman period to the Middle Ages to be revived again in America, and sacred ways such as the stone avenues of England and Brittany; the roads and floors of Malta, Crete, where one of the oldest paved roads is known and drainage-always an encouraging indication of progress-received careful attention, Mycenaean Greece, Egypt, where roads were built principally to facilitate moving building-stones, Mesopotamia, where bricks were often used (sometimes with a bituminous mortar) for city streets and house floors and where one cobble pavement may go back to 3500 B.C., India (Mohenjo-Daro and Bhita), where a kind of concrete was devised, Greece and Rome.

If in Periclean Greece roads were poorly developed, it was because of the extensive marine traffic, because also of divided authority. An inter-

city network existed without governmental responsibility; of deliberate road constructions we can identify quarry roads, and staircase or ladder passes in the ubiquitous mountains, in addition to the sacred ways. These were often paved with laid slabs or driven in virgin rock, frequently with deep artificial ruts or tracks: true stone railways. Within the cities there were few pavements, and those few undrained, the Greeks always preferring intellectual to physical comfort. In the Hellenistic kingdoms, slab pavements appear with increasing frequency.

We are much better informed about Roman roads, every schoolboy knowing something of their massive construction, and Forbes adds no unfamiliar material. I hoped that he had found fresh data on the disputed date of the paving of cross-country reaches of such typical national highways as the Via Flaminia and the Via Appia. Instead he has been content to copy from the older handbooks; and, in fact, there is no modern

contribution to this question.

There are no footnotes, but a special bibliography is attached at the end of each chapter, in addition to the general bibliography and a useful list of ancient sources at the end of the volume. There are also three chronological tables. The book is indexed. There are some indications that Mr. Forbes' editors are ill at ease in the language of the text, and a few errors may be charged also to inadequate proof reading.

Mr. Forbes is thoroughly at home in the subject of roads and road-construction and thoroughly enjoyed writing this book. He has added a good supply of gossip about roads and their makers and keepers, and, while his volume is not encyclopaedic, it is a readable and comprehensive survey. Few students of archaeology will find it an indispensable handbook; but no self-respecting classical library will be without it.

JOTHAM JOHNSON

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ZUR GESCHICHTE DES CURSUS PUBLICUS, by Erik J. Holmberg. Pp. 158. Uppsala, A.-B. Lundequistska Bokhandeln, 1933.

Dr. Holmberg's monograph on the history of the Roman Postal system has for its primary objective the elucidation of various detailed problems on which previous writers have not been able to agree, or have not reached satisfactory conclusions. Wherever there is general agreement, however, Holmberg incorporates in his discussion the results of earlier studies to give a complete picture of the development and organization of the institution.

He uses the term Cursus Publicus in preference to römisches Postwesen because the latter is adequate only for that section of the cursus publicus which was employed for the transmission of letters and messengers, the so-called cursus velox. It does not include the section devoted to transport service.

The work is divided into five chapters. The first is introductory. It discusses organized and unorganized messenger service in Greece, Persia. and the Hellenistic kingdoms, with special reference to Persia and Ptolemaic Egypt. Chapter II is given to the origin and development of the Roman post up to the time of Diocletian. After a brief description of Republican precedents, in which Holmberg argues against the theory that Tiberius Gracchus instituted an organized postal system, he discusses the adoption by Augustus of a system modelled on that of Ptolemaic Egypt. The original plan he ascribes to investigations made by Julius Caesar during his long visit at the court of Cleopatra. About the administration and use of the post before Diocletian little enough is known, for the imperial ordinances relating to it are mostly later. Chapter II contains, however, much interesting material and a number of solutions for disputed questions.

For Chapters III–IV more ample evidence is available. They discuss in detail the organization and history from the time of Diocletian, including such questions as the relation between postal and transport services, the postal stations and their equipment, the officials in charge of the system and its personnel, their training, organization, and privileges, and finally the various reorganizations of the system under Diocletian and his successors, together with a brief account of its survivals in the German kingdoms and in the Byzantine Empire.

The monograph is well organized and well documented. There is a full bibliography, an excellent index, and a list of imperial ordinances from the later codes which relate to the administration of the cursus publicus.

ALLEN B. WEST

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Arretinische Reliefgefässe vom Rhein (Materialien zur römisch-germanischen Keramik

 by August Oxé. Pp. 129, pls. 72. Frankfurtam-Main, 1933. RM. 17.

Dr. Oxé's book has already come to occupy a well-merited position as a recognized manual in the apparatus of Roman archaeology. Appearing as a unit in a distinguished series, it comprises all the decorated Arretine sigillata found in the Rhineland as well as 218 Arretine parallels (mostly unpublished) assembled from elsewhere. All the pieces are thoroughly discussed and excellently illustrated with photographs or drawings, with the result that the available material on Arretine pottery already contributed by Dragendorff, Chase and others has been more than doubled. Further, the forty introductory pages, far from being a review of previous work, are almost entirely devoted to original and striking presentation of new views which reflect the mature judgment of a scholar whose lifetime interest has been precisely the ware under discussion.

The decorated pottery of M. Perennius is naturally the principal field of investigation; cogent identifications of Tigranus and Bargathes are given, and an anonymous "Meister mit den Zahnlücken" has been separated from the others in the same factory. For Romanists this recognition of individual techniques and attribution on stylistic grounds is a new departure along the path already well beaten by students of Greek painted vases, and a comparable success may be predicted for an extension of Dr. Oxé's methods, which have the special value (quite apart from making more tangible one of the most successful decorative geniuses of Roman ceramics) of drawing attention to new criteria. Second in importance only to the contributions on Perennius are those dealing with Cn. Ateius who, for all his enormous productivity, remains a somewhat shadowy figure. In previous studies Dr. Oxé has already made important contributions to our knowledge of this potter and his circle; here he identifies all the famous ceramic representations of the four Seasons as emanating from his shop, and adds other notes. Finally, through the whole volume runs the particular purpose of increased chronological precision.

The text is completed by exceptionally exhaustive indices.

Considerations of space necessarily relegated the earliest Gaulish decorated wares on the Rhine to the subsequent fascicule of the same series (reviewed A.J.A., 1934, p. 498), and caused the omission of all the undecorated Arretine pottery. This latter is regrettable, for the work of Löschcke, Geissner and others dealing with the wares of datable sites deserves a somewhat detailed correlation. It is also regrettable that some American collections, and especially the great collection at Arezzo, were not available for comparative purposes, and that no use was made of Viviani's I Vasi aretini and the illustrations in Franciosi's Arezzo, which offer additional parallels for the new "Meister."

The prospective purchaser should be warned that the paper binding of the book as sold is quite inadequate to support the weight and format of the plates, but the necessity for rebinding does not make it any less indispensable.

HOWARD COMFORT

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Römisch-Germanische Keramik im Saalburgmuseum, by R. von Uslar, K. Bettermann and H. Ricken. Sonderabdruck from the Saalburgjahrbuch VIII, 1934. Pp. 61–182, pls. IV-XIV.

Under this general title are grouped three wellillustrated essays on the ceramics of the Taunus limes and Rhineland. Von Uslar discusses the Germanic ware found at the Saalburg and at Zugmantel nearby, on the basis of which he concludes that there was a continuous Germanic population in these castella, using their own traditional pottery during and after the middle of the second century A.D., and that these Germans were Chatti. The pottery has nothing in common with the familiar Roman wares. Bettermann deals with the Rhenish so-called "red painted Wetterau ware," which is contemporaneous with sigillata and partially imitates it, but is distinct from it. He distinguishes a Claudian, a Flavian, and an early Hadrianic group. This article is the first comprehensive discussion of this category of pottery, and is to be followed by others. Ricken publishes the decorated sherds from the Saalburg and Zugmantel; only here does the volume touch sigillata in the strict sense. As is to be expected, there is comparatively little South Gaulish ware, including only three fragments of Form 29, and four of Form 30. No ware from Lezoux is mentioned. The principal material is East Gaulish and Rhenish, with special emphasis upon the products of La Madeleine, which are given excellent and detailed attention. One might have expected to find Oswald and Pryce's Terra Sigillata mentioned in the bibliography.

In the nature of the case, these studies are of interest to archaeologists whose attention focuses primarily on the Rhineland, for only the third article ventures into a field which has much larger connections. Within their sphere, however, each study fills an important gap in a manner worthy of the best German scholarship.

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DIE LIPSANOTHEK VON BRESCIA: STUDIEN ZUR SPÄTANTIKEN KUNSTGESCHICHTE, 7, by Johannes Kollwitz. Pp. 68, pls. 2, index and bibliography (6 pls. separately bound). Berlin and Leipzig, Walter de Gruyter, 1933. RM. 25.

The need for such a work as this by Kollwitz has long existed. The Brescia casket has for generations passed from paragraph to footnote, the sport of theologians with an interpretation of one of its scenes, and of archaeologists with a theory about its architecture or its figure style. It has never before received the thorough examination which it deserves; there has never been a really serious discussion of what is one of the unique examples of Early Christian art, and a monument indispensable to the complete understanding of its period.

This gap Kollwitz has attempted to fill, with a commendable appreciation of its importance. He has accomplished much of value: providing a résumé and a sound critique of earlier investigations, identifying a difficult range of subject matter with almost complete persuasiveness, and clarifying some of the fundamental issues of style and iconography. His method, in its lack of prejudice, is a welcome descent from those windy heights on which the advocates of Rome and of the East shout in perpetual vituperation. The value of the work as a whole, however, seems to me impaired by a comparative lack of success in those very factors upon which the author has laid the greatest stress. His treatment of the casket's iconography provides a long list of parallels for every subject illustrated; at the end this synthesis of material is so little used in a comparative iconographic analysis, that its result is far less than it should be, and conclusions essential to the casket's provenance are left undeveloped. Again, in his analysis of late antique sculptural style, Kollwitz errs in oversimplifying a process whose complexities have hardly yet been fully realized, and achieves his conclusion by a stylistic parallel with fourth-century Christian sarcophagi

which is actually meaningless. The author's work, therefore, is admirable in clearing away the obstructions of the past and in preparing an advance to a higher level of criticism of Early Christian sculpture in general. The final advance itself is not made.

A prime essential of the Brescia casket, by this analysis, is its transitional character. This position midway between the antique and the mediaeval is exhibited alike by its style and by its iconography. The former has renounced almost every preoccupation of Hellenistic and Roman sculpture, while still retaining an ultimate stamp of classic form which sets it apart from the Middle Ages. In iconography again the casket serves as a link between the profoundly Hellenistic spirit of earliest Christian art and the complex dogmatic cycles of later centuries. Some of its subjects, like the Resurrection of Lazarus and the Healing of the Blind, are almost literal transcriptions from the catacombs; even the newer scenes of Christ's Passion are handled with an antique decorum which forbids any expression of emotion, and which stops short in its sequence before the tragedy of the Crucifixion itself. Side by side with these vestiges of the past, Kollwitz sees in the casket a clear iconographic advance. In handling the individual scene, the earlier symbolic method is giving way to a new interest in literal narrative; the process is epitomized in the substitution for the old allegorical Good Shepherd of a wholly new parable which shows both the attack of the wolf and the hireling's flight. In the general attitude toward illustration, this move from the abstract and symbolic toward the concrete historical narrative effects the growth of a novel form, the episodic cycle. While the Latin frieze sarcophagi continue the old juxtaposition of unrelated scenes throughout the fourth century, the new method is already well advanced in the casket which is contemporary with their later examples. This greater progressiveness of the ivory as compared with fourth-century sculpture in general Kollwitz explains as a higher degree of influence from manuscript illumination, to him the especial breeding ground of changing ideas in the post-Constantinian era. By the degree to which the casket makes use of the new episodic method, its relative position in the century may be approximated. Its elaborate five-part cycle of the Passion is well beyond even the most fully developed of columnar Passion sarcophagi, which seem to appear in the fifth decade of the fourth

century. It is, on the other hand, more primitive than monuments at the end of the century and in the early fifth which illustrate the Crucifixion and scenes of the risen Christ. By this rough comparison its place seems in the last quarter of the fourth century.

The crux of earlier discussions of the casket has always been the question of its provenance. Here, where previous scholarship has failed most lamentably to achieve any consensus, Kollwitz summarizes the various theories, passing courteously over those which should never have been expressed and subjecting the more important to a competent critical estimate. His greatest temerity lies in a rebuttal of the thesis by which Strzygowski cowed a whole generation; the statement that the peculiar building within which Christ is shown teaching His apostles can be explained only as an imitation of basilicas of Asia Minor or Syria with barrel vaulted naves and twin-towered façades, and so must indicate an eastern origin for the casket itself. Kollwitz shows that the earliest record of such Christian buildings in the east is a century later than the probable date of the ivory; that in the fourth, there is no reason to suppose that such imitated architecture should have any specifically Christian character; and that in the pagan tradition which is probably its source, both vault and towers are commonplaces over the Roman Mediterranean world. He indicates again that a far more certain architectural factor holds the casket securely to the west; the gabled form given the tomb of Lazarus; and that a second detail, the shepherd's cape, is not found elsewhere outside of the Latin west.

The least commendable portion of Kollwitz' work is his attempt to reinforce the conclusions of date and provenance already obtained by iconographic methods, through an analysis of style. His procedure is an apparently impeccable one in theory: first to draw a broad comparison between the style of late antique sculptures in the east and in the west, and to determine the principles visible in each which contrast with the other; to fit such general principles to the individual case of the Lipsanotheca and achieve a general provenance; then to compare the casket with the general development in its own region, and so arrive at an approximate date.

Preliminary analysis leads him, thereafter, to the simplest and most seductive of systems. Sculpture in the east at all times shows an interest in plastic form greater than that of the

west, and retains it long after the west has surrendered to a new Flachenstil. The Brescia casket, showing almost no concern for the values of plasticity, is clearly western. There remains the task of assigning its place among other monuments of the Latin world. Kollwitz sees the development of late antique sculpture in the west as a broad and irresistible progress toward flatness which largely obliterates all accidental differences of atelier method. Nothing is easier, therefore, than to place such decadence on a systematic basis. The sarcophagus of Junius Bassus in the Vatican, dated 359, shows a relatively strong retention of three dimensional values. At the end of the century Kollwitz puts three other sarcophagi, the "city-gate" examples at Ancona and Milan, and the columnar of Probus; here the ideals of the Flat Style are in complete command. Somewhere between these two extremes, and thus around 370, may be set two double-register frieze sarcophagi, that of the Trinity in the Lateran and the sarcophagus of Adelfia in Syracuse. These are comparable in style to the casket, and so fix its decade.

I can subscribe to one at least of the premises upon which this conclusion is based; the fact that a demonstrable difference exists between the ideals of late antique sculpture in the Greek east and in the Latin west. This difference, however, is hardly that described with such pellucid simplicity by Kollwitz; a retention of plasticity on the one hand and its rapid abandonment on the other. The quality of his understanding of Early Christian sculpture is placed in a somewhat dubious light by the author's venture into the field of fourth-century sarcophagi. Here, after having built up with such pains the axiom that plasticity belongs to the east, Kollwitz chooses precisely the most eastern of all sarcophagi in Italy, the city-gate group, to illustrate his stage of u'timate flatness. Kollwitz indeed has apparently not realized that an eastern style can exist outside the geographical limits of the Orient; it is not remarkable then that his bibliography fails to include the most significant criticism of fourthcentury sculpture within the past decade, the articles by Marion Lawrence in Volumes X and XIV of the Art Bulletin, on the city-gate and columnar sarcophagi. I need not recapitulate the evidence by which Miss Lawrence has established the fundamentally Greco-Asiatic character of these monuments found and undoubtedly executed in Latin territory. It must be insisted,

however, that their style is not simply a logical culmination of forces operating within the Latin tradition, as Kollwitz' system would suppose, but is a distinct and alien entity existing parallel with the other after the mid-century. At their head and roughly contemporary with the sarcophagus of Junius Bassus stands the city-gate sarcophagus at Milan, which Kollwitz has casually placed at the end of his series with that of Ancona, as though no difference existed between them. The sculptural development of the latter half of the century, then, is no simple decadence of one tradition but rather the complex interaction of two, in which the criterion of relative lack of plasticity as Kollwitz applies it is quite meaningless.

In the face of such a complete miscomprehension of sarcophagus sculpture it is hardly necessary to protest further that the two doubleregister examples which Kollwitz sets in the 70's as a stylistic hitching-post for the casket, actually belong a generation earlier, and lead up to the Bassus instead of serving as its degenerate aftermath. Even were they dated in Kollwitz' decade, however, I should deny the validity of a stylistic comparison between stone and ivory for any period except the most general. The author's reliance on this parallel with the sarcophagi is the more surprising in view of his repeated efforts to emphasize their wide separation from the casket in every other respect. Surprising also is his almost complete silence on the problem of the stylistic relationship between the Brescia casket and the other late antique ivories of the west, where a parallel is possible.

An index of date less dangerous than the stylistic has been ignored by Kollwitz, probably because at the time of his writing he had not yet seen the recent publication of Delbrueck, Spätantike Kaiserporträts. From the arrangement there made of fourth-century portraits, it is evident that Kollwitz is mistaken in saying that the notable female coiffure of the casket remained in use throughout the century after its introduction by Helena. The style actually seems to have lapsed at Helena's death for fifty years, and to have appeared again only in the last quarter of the century. In sarcophagus portraits it appears in only a very few which for other reasons belong in the last decades; as on the city-gate sepulchre of Catervius at Tolentino,

Kollwitz' final conclusion as to provenance is simply a general attribution to the west. He believes that knowledge of regional differences in the art of Latin Christianity is not yet broad enough to warrant greater precision. With this disclaimer of further responsibility he ventures a timid suggestion that the casket may belong in Upper Italy since it uses a scene of David and Goliath which elsewhere appears only on sculptures of that region or of Gaul.

One must respect the conviction of a critic who rejects the iconographic method completely. His colleague who uses that method once or twice to draw a hesitant conclusion, and then sets it aside as of no further value, is less readily understood. Kollwitz uses the shepherd's cape discussed by Rodenwaldt and the Lazarus tomb discussed by Baldwin Smith to place his casket in the west; he uses the scene of David and Goliath to suggest an origin in Upper Italy; for every other subject on the ivory he is careful to list all important iconographic parallels. He recognizes and values the method; it is the more remarkable that his handling of it should be so ineffective.

Although Kollwitz has not done so, the scenes of the Brescia casket may be divided into three iconographic groups. One consists of subjects whose earliest phase in the west is to be seen in the Roman catacombs, but which by the fourth century had become familiar throughout the Latin regions. The second contains scenes which are either unique in Early Christian art, or are found rarely and in approximately equal distribution between Rome and the north. These two divisions can contribute nothing toward a solution of the ivory's provenance. The third, however, which comprises almost a third of the entire repertory, consists of subjects which either appear only in the northern Mediterranean regions of Upper Italy, Provence, and Spain, or are there so clearly preponderant that their presence in Rome becomes exceptional. The most striking fact about this last group is that it includes almost the whole Passion cycle on whose elaborate form Kollwitz has placed so much emphasis.

Here is perhaps the most important factor which a study of the Brescia casket might bring out. As Kollwitz has shown, it stands at the opening of a new era in Christian illustration, in which the cycle of related events takes the place of the old heterogeneous juxtaposition of symbols. Its parallels in that epoch-making departure are with monuments of the north Mediterranean regions, and not with Rome. The situation is most strik-

ingly shown in the illustration of the Passion, which, as Kollwitz has noted, appears in its earliest and simplest form in the west at the midfourth century, and which in the Brescia casket has already become an important episodic sequence. Typical early scenes of the "Passion sarcophagi," Christ before Pilate and the Symbolic Resurrection, are as frequent in Rome as in Gaul (they even can, I think, be derived ultimately from the north, but the argument is lengthy). The developed Passion cycle, on the other hand, is quite unknown in Rome. It is the subject rather of a group of monuments connected exclusively with Upper Italy and Gaul. This group comprises first a number of northern sarcophagi, the mosaic narrative of San Apollinare Nuovo, and the ciborium columns of San Marco. To it belong the ivories assembled by Baldwin Smith in his "School of Provence" (Art Studies, 1924); the Brescia casket, and the wood doors of Santa Sabina in Rome, whose origin in the north has been claimed most recently by Weigand on the basis of their use of a detail otherwise found only in Upper Italy, the Constantinian monogram in the nimbus of Christ (Byz. Zeit. XXX, p. 587). Spain has been related to the group because the Dittochaeum of the Spaniard Prudentius seems a description of the earliest elaborate illustrated concordance of Old and New Testaments, and because a unique detail linking its iconography to that of Provence has been lately proved by Mc-Donald (Speculum, VIII, 1933).

Episodes of the Passion which appear exclusively within this group in the Early Christian art of the west, and which are unknown among Roman monuments are: Christ in Gethsemane; the Betrayal; the Arrest; Judas Hanged; perhaps Christ before Caiaphas (the Roman evidence for this scene is shaky); the Denial by Peter to the Maid; Christ bearing His Cross; the Crucifixion; the Holy Women at the Sepulchre; the Ascension; the Doubting Thomas, and other scenes of the Risen Christ. The Passion as it appears on the Brescia casket is an early version of the maturer cycles shown by the frieze sarcophagus at Servannes, the Passion ivories of Milan and the British Museum, the Santa Sabina doors, the Ravenna mosaic and the ciborium column in Venice. The question of its provenance is thus the crux of a larger problem tracing the whole growth of Christian art in the west; a thorough analysis of iconography can leave no doubt that the Lipsanotheca is a creation of the north Mediterranean regions, and from its location in Brescia probably of Upper Italy.

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THE ILLUSTRATIONS OF THE UTRECHT PSALTER, by E. T. De Wald. Pp. iv+81, pls. CXLIV. Princeton University Press, 1933. \$14.00.

The second part of this publication has not yet appeared, viz., Professor De Wald's commentary. He has merely published in facsimile the drawings preceded by a brief description of what these really represent. But the bald summary, with its direct simplicity, is itself a feat of literatureto say everything and nothing more, yet never to be heavy, nor monotonous, nor stilted. After the hundred and fifty psalms follow the scriptural and liturgical canticles, -two from Isaiah, two from Moses, those of Hezekiah, Hannah, and Habakkuk, the Song of the Three Children, the Te Deum, Benedictus, Magnificat, and Nunc Dimittis, the Gloria in Excelsis, and the Apostles' and the Athanasian Creed. It will be interesting to know why the Nicene Creed was omitted. Lastly, appears the apocryphal psalm No. CLI.

There is little, if any, criticism to which the great and beautiful publication is liable. Indeed if Professor De Wald and all his memoranda were now to be wiped off the earth, the civilized world would still be under a great debt to him for the possession of anything so lovely. The human figures are often grotesque but always dramatic; the geography and the architecture are gracious and suggestive; and the animal-painting is exquisite. Take the battle of cavalry outside a city gate, the milking of cows and goats, the lion standing over a dead man, the birds with their young in their nest or on their wings, the beasts grazing in the abyss, the terrified horse whose saddle is empty; take David with his flock and his unicorn. Take indeed any page, and, examining a single episode, recognize the perfection that underlies it. On the other hand, discarding almost all interest in representation, open the book at folio 35 recto, where the Soul waits upon God, or 47 recto, where the heathen are coming into the inheritance; at 55 verso, which is the Venite, or 88 recto, the First Canticle of Moses; 11 recto, where the heavens declare God's glory, or 26 verso, of Deus noster refugium, - and appreciate not only a great landscape art but an art of pure design. The excellence of the reproduction has made this possible as never before.

Therefore, this first volume has a double value, for scholars and for the student of pure art; and the outcome is that both of these classes, and all whose concern lies with beauty in its purity, are waiting with ill-concealed impatience for the Commentary, historical, critical, and aesthetic. They wait, though with impatience, yet with entire confidence.

G. G. King

BRYN MAWR COLLEGE

THE CIVILIZATIONS OF THE EAST. Vol. III, China, and Vol. IV, Japan, both by *René Grousset*. Pp. 365 and 301+xl; illus. Translated into English by *Catherine Alison Phillips*. New York, Alfred A. Knopf, 1934. \$5.00 each.

To those studies in Oriental art for which we are already indebted to M. Grousset, the two volumes considered here form a worthy addition. In them the author has done a really fine piece of work, bringing together in delightfully written and not too technical form an amount of information perhaps nowhere else so readily available.

The volume dealing with China begins with the prehistoric period. This is the least satisfactory portion of the book. No "halberds and daggeraxes" (p. 41) have been found on Chinese Neolithic sites. The Yang Shao painted pottery, instead of being "Aeneolithic" (i.e., Chalcolithic), has long been recognized as purely, Neolithic. The author's comparisons in this connection with "Susa II" lose much of their point now that the existence of such a period seems to have been pretty well discredited. Nor is there any mention of the sharp break between the Chinese Neolithic and the well-developed Bronze Age civilization which directly followed it. Again, the art of the Shang period (ca. 1550-1050 B.c.), so far from being in any sense "rudimentary" or "primitive" (p. 18), was in reality, as recent excavations have shown, very high indeed. It is misleading also to speak of the ancient Chinese garmenthooks as "fibulae" (pp. 59 ff.); the latter do not occur in China.

In discussing the art of the later epochs, M. Grousset stands on much firmer ground; for here he is an acknowledged authority. He makes very clear the different styles characterizing successive eras. Thus he vividly describes the youthful vigor of Han art (206 B.C.-220 A.D.), and points out how that of the Six Dynasties (corresponding roughly in date to the period of the Völkerwanderung in Europe) was modified by intrusive "steppe" elements from Central Asia. He then

gives us a first-rate description of Chinese Buddhist art, calling attention incidentally to the way its development was affected by Sāsānid and Greco-Bactrian influences. His account of the aesthetic achievements of the great T'ang Dynasty (618-907 A.D.), with their vigor tempered by maturity, is thoroughly good. He notes here the T'ang love of strong coloring, and quotes Professor Pelliot to the effect that the painting of landscape for its own sake did not yet exist. Excellent likewise is the author's description of the art of the Sung period (960-1278 A.D.), with its contemplative, philosophical quality, its love of landscape, and its preference for monochrome washes in its painting; his assertion that the latter owed its inspiration to the poets rather than the painters of the preceding T'ang period seems thoroughly justified. M. Grousset also characterizes in very apt terms the art of the later Chinese dynasties-the Mongol or Yuan, the Ming, and the Manchu or Ch'ing. Here he points out that the great creative impulses of earlier centuries were no longer felt, so that art became increasingly reactionary and imitative. All in all, the book is deserving of very high praise.

The same may be said of the companion volume, on the art of Japan. Here again, in treating of archaeology and history, M. Grousset displays something less than certitude. There can have been no "Malay" influences upon prehistoric Japan (p. 9); those to which the author thus refers are in reality traceable to Indonesia and southern Asia. "Kumaso" and "Hayato" (p. 10) seem to have been one and the same people, and we know nothing whatever in regard to their cults. It can hardly be said that Japanese Neolithic pottery is "totally distinct" from that of China (p. 11); it appears to have been strongly affected by both northern and southern continental influences. The lofty shiro, the manystoreyed Japanese castle of feudal times, was not known during the Fujiwara period (889-1192 A.D.) nor for several centuries later (p. 89). The Hōjōs who appear on pages 126, 132, and elsewhere as seated at Kamakura should have been distinguished from the other clan of the same name who are mentioned on page 211 as being evicted a couple of centuries later from their stronghold at Odawara by the great Hideyoshi. The "Spanish missions" spoken of on page 182 were in reality Portuguese, while Hideyoshi never "accepted" Christianity (p. 213), although he tolerated its presence in Japan for a season.

Points like these are, however, of relatively slight importance in a book of this character. When M. Grousset speaks of the art of Japan, he is once more thoroughly at home. His account of the introduction of Buddhism and its great influence upon Japanese aesthetic development is excellent. So, too, are his characterization of the delicate, almost over-cultured spirit of the Nara and Fujiwara eras and his evaluation of the truly great portrait sculpture in wood of the Kamakura period (1192-1333 A.D.). M. Grousset dwells with just enthusiasm on the high quality of Ashikaga painting (1337-1573 A.D.), and says truly that the real heirs of the great Sung masters of landscape were not the Chinese painters of the Ming Dynasty but Japanese artists of the stamp of Sesshū and Sōami. The author's appreciation of the personalities and art of the makers of Japanese prints is rightly high; nor does he overlook the excellence of Japanese work in the minor arts-lacquer, netsukes, sword-guards, and the like.

The concluding portion of the volume is devoted to the Tantric Buddhist art of Bengal, Nepal, and Tibet, with its symbolism based upon sensuality and terror. The author also reproduces a few Siamese statues, and closes with the promise of a future book in which he will try to analyze the aesthetic ideals of Asia and compare them with those of the West.

The work of translation has been very well done, and gives not merely the sense but also the spirit of the French original. "Hennin" (p. 126 of the volume on China), as a word perhaps unfamiliar to many, might better have been translated or explained. The "eland" mentioned on page 141 of the same volume is not the large South African antelope to which that name applies in English, but the elk, or as it is usually called in America, the moose. The "Blue River" so frequently mentioned, to the mystification of readers unfamiliar with its French name, is the mighty stream known throughout the English-speaking world as the Yangtze.

The proof-reading has been carefully done, and errors have been almost entirely eliminated. The word "traditional" (p. 48, line 2 of the volume on China) should surely be "transitional"; and "Itobe" (p. 161, note 1 of that on Japan) should be "Nitobe." Both volumes are well documented, and M. Grousset's plan of telling us in his foot-

notes where we may find reproductions of well-known works of art not shown in his own pages is most commendable. It would have added to the convenience of the volumes had they been indexed separately. The illustrations are as a rule well chosen, and the general appearance of the books does credit to the publisher.

CARL WHITING BISHOP

FREER GALLERY OF ART Washington, D. C.

CAROLINGIAN ART—PAINTING AND SCULPTURE IN WESTERN EUROPE, A.D. 800-900, by Roger Hinks. Pp. x+224, pls. 24. London, Sidgwick & Jackson, 1935. 15s. net.

The book before us is the work of a well-trained classical scholar who has gone adventuring in a field which is often despised by his colleagues. In the three parts of this work, a well-ordered and successful attempt is made to show what elements in Roman and barbaric art were important for the organic growth which produced the Carolingian, then to show that the art of Charlemagne's time was in fact a new creation-a creative fusion of northern and Roman elements, rather than a mere revival; and finally to give some account of this new art by description, analysis, and illustration. There is in Mr. Hinks' book more than a trace of the German ideologies which are now so popular with art-historians, but they are discreetly handled, and the appeal of the book comes from its lucid handling of material. By a deft biographical touch here and there, characters who are generally mere names are brought to life. A sense of continuity, given by constant reference to classical and late-classical prototypes, and a vivacity in presenting the lively northern spirit which transformed them, unite to make the book a pleasant one to read, without reducing it to the level of a work of vulgarization. Mr. Hinks very effectively makes the point that the Carolingian artist "abandoned the rigid Celtic calligrams and the dense jungle of Germanic ornament . . . converted prose into poetry by the vehemence of his imagination," and, relying for his themes on the mixed art of the later Roman Empire, by his energy and genius formulated the decisive principles of western European mediaeval art.

KENNETH CONANT

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PLATE XXIX A.—BAS-RELIEF OF THE TYCHE OF PALMYRA (Courtesy of the Gallery of Fine Arts, Yale University)



PLATE XXIX B.—Bas-relief of the Tyche of Dura Crowned by Seleukos Nikator (Courtesy of the Gallery of Fine Arts, Yale University)

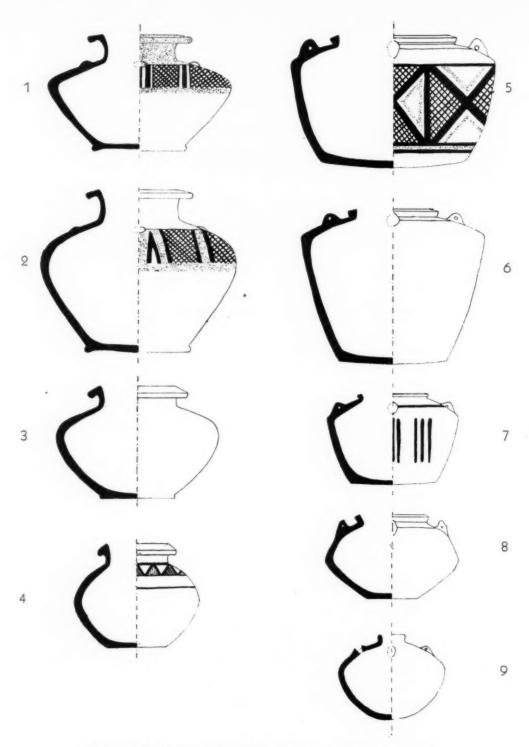


PLATE XXX.—POTTERY VESSELS FROM JEMDET NASR, IRAQ. (SCALE: 1:4)



PLATE XXXI. - POLYCHROME VESSEL WITH NATURALISTIC DESIGNS FROM JEMDET NASB, IRAQ. (SCALE: POT 1:4; DESIGN 1:2)

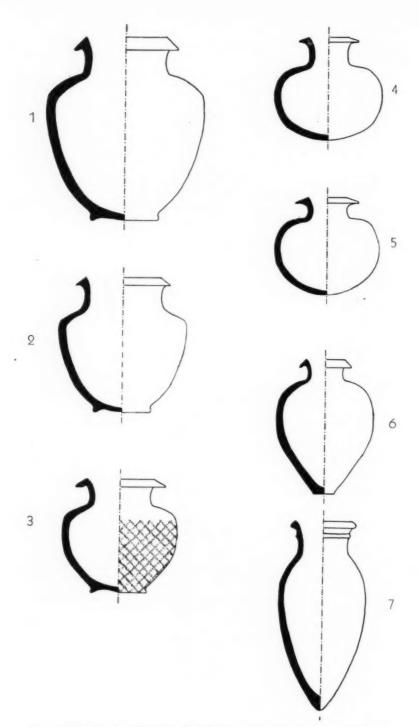


PLATE XXXII.—POTTERY VESSELS FROM JEMDET NASR, IRAQ. (SCALE: 1:4)

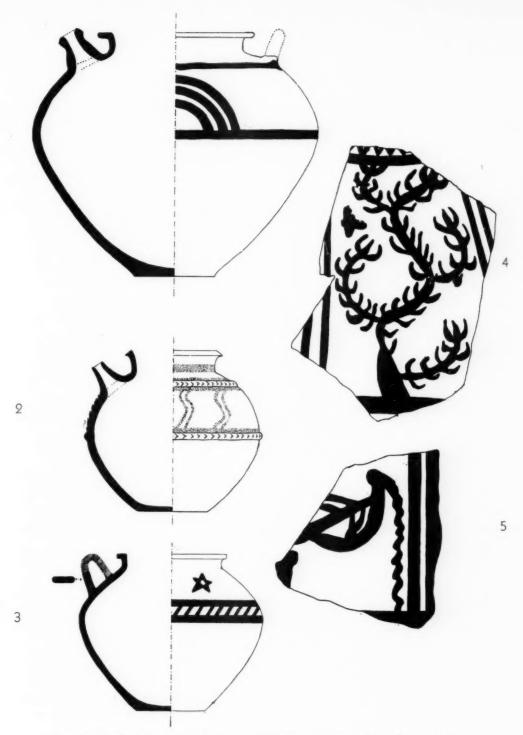


Plate XXXIII,—Monochrome Vessels and Sherds from Jemdet Nasr, Iraq. (Scale: Pots 1:4; Sherds 1:2)

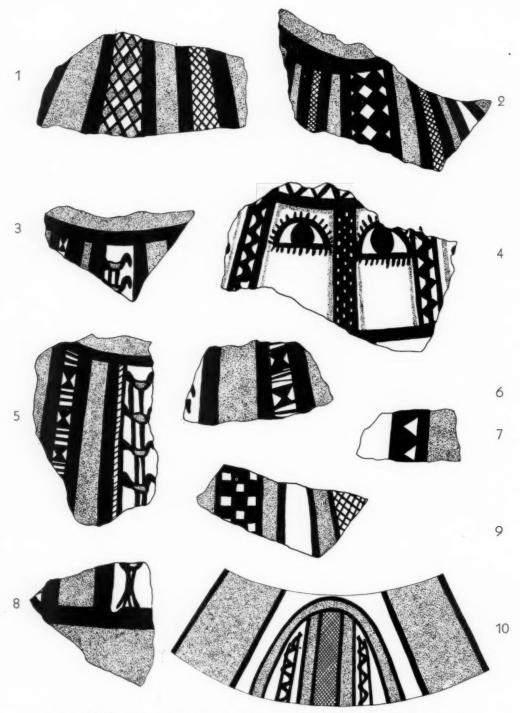


Plate XXXIV.—Polychrome Sherds from Jemdet Nasr, Iraq. (Scale: Nos. 1-9, 1:2; No. 10, 1:4)



PLATE XXXV.—MONOCHROME SHERDS FROM JEMDET NASR, IRAQ. (SCALE: 1:2)



PLATE XXXVI.—SCALE, RIMS, 1:2: Nos. 1-6, PLAIN: 7-9, BEADED; 10, LEDGE; Nos. 11-24, OVER-HANGING; Nos. 25-33, CARINATED; Nos. 34-35, UNUSUAL TYPES: Nos. 36-41, BOWL RIMS, HANDLES (SCHEMATIC, No SCALE); Nos. 42-43, ROUNDED PROTUBERANCES; Nos. 44-46, PERFORATED LUG; No. 47, Lug; No. 48, Ring: No. 49, Strap; No. 50, Inverted "U;" No. 51, Double Knob; No. 52, Upright Ledge

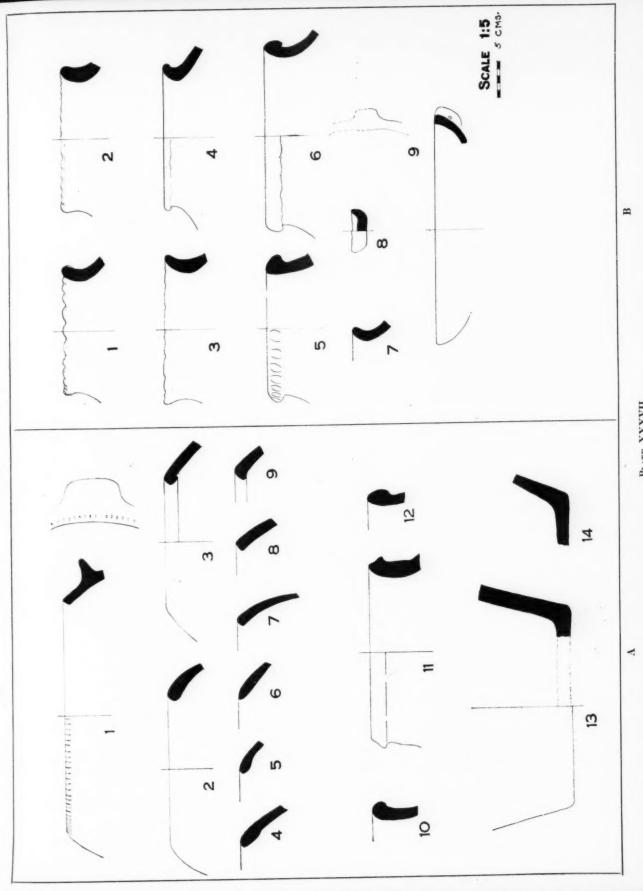


PLATE XXXVII

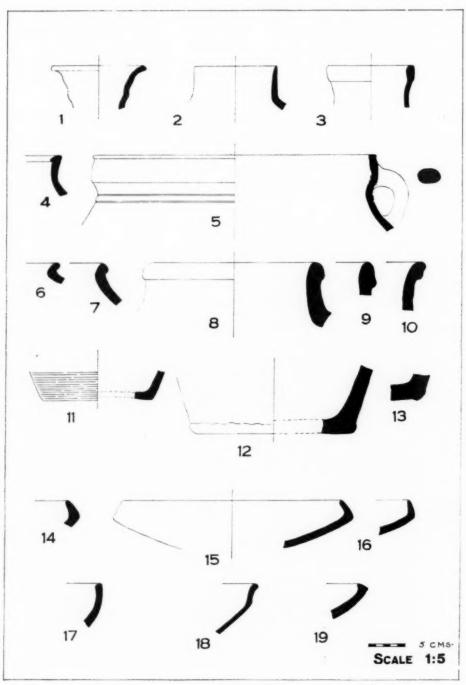


PLATE XXXVIII

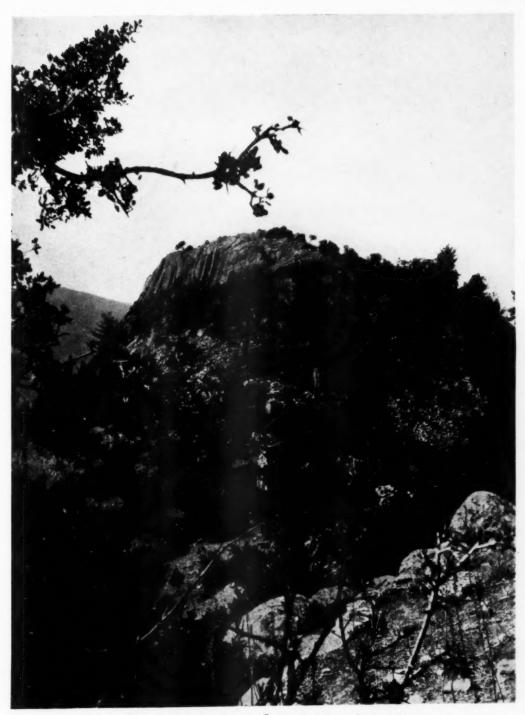


PLANCHE XXXIX.-HYDISOS: LES REMPARTS ET L'ACROPOLE



A. Keramos, vue du sud. Au centre, l'acropole



B. Keramos, vue du sud. Ce monument est à l'Est de la ville  $\label{eq:lanche} \text{Planche XL}$ 



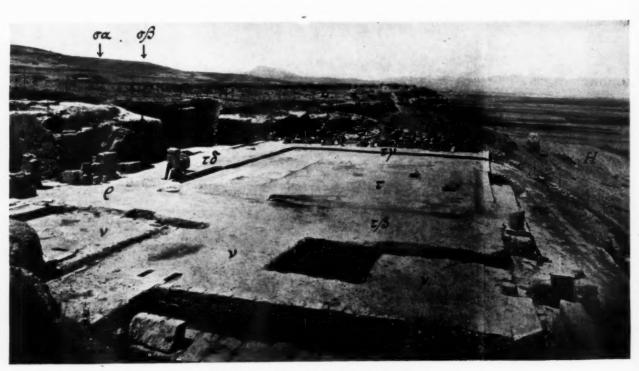




PLANCHE XLI.—Tête Archaïque Trouvée à Keramos



A. - North Side of the Corinthian Plateau from the North



B.-General View of Lerna from the East Plate XLII



1. Reg. VI, 8, 21



2. Reg. VI, 2, 4 (House of Sallust)



3. Reg. VI, 12, 2 (House of the Faun)



4. Reg. VI, 12, 2 (Exedra)

PLATE XLIII



1. Reg. VI, 12, 2 (Second Peristyle)



2. Reg. VII, 4, 57 (House of the Figured Capitals)



3. Reg. VII, 4, 59 (House of the Black Wall)



4. Reg. VI, 9, 5 (House of the Centaur)

PLATE XLIV

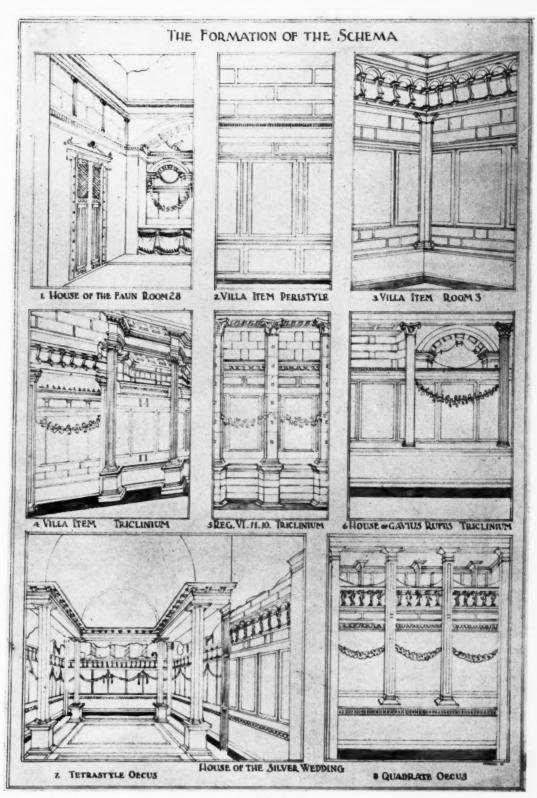


PLATE XLV

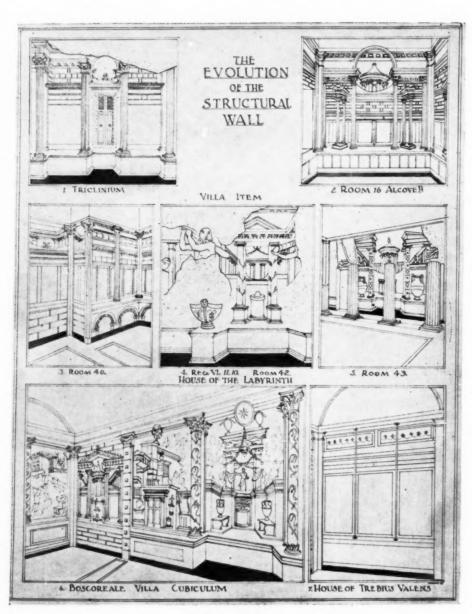


PLATE XLVI